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MINISTRY OF PUBLIC HEALTH, EGYPT

---

# ANNUAL REPORT

ON THE WORK OF THE

## Ministry of Public Health

for the Year 1948

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Government Press, Cairo.

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# MINISTRY OF PUBLIC HEALTH

## ANNUAL REPORT FOR THE YEAR 1948

### Part I.—PUBLIC HEALTH

#### Chapter I.—Vital Statistics

##### A.—Population :

The estimated population of Egypt in mid 1948 was 19,554,800 as compared with 19,128,000 in mid 1947. Table No. 1 shows the age and sex distribution of the population and proportional rates per 1000 at all ages.

##### B.—Births :

The total number of births for all Egypt during 1948 was 832,728, *i.e.*, a birth-rate of 42.5 per 1000 of the total estimated population as against 43.5 in 1947. The highest birth-rate of 55.1 was recorded in Suez Governorate. The lowest of 30.1 was recorded in Qena Province. During the previous ten years (1939–1948), the birth-rate ranged between 38.2 in 1942 and 43.9 in 1945 (table No. 2). From table No. 4 it will be observed that the birth-rate in 1948 was highest during the month of January reaching 47.6 per thousand population and the lowest was during the month of May reaching 38.6. It will be seen from the same table that there was more male than female births in 1948. The ratio was 91.9 females per 100 males.

##### C.—Deaths :

A total of 397,976 deaths were recorded during 1948 in all Egypt or a ratio of 20.3 per thousand population as against 21.3 in 1947. The highest death-rates were 27.3 and 27.2 recorded in Kaliubia Province and Suez Governorate respectively. The lowest was 11.9 recorded in Qena Province. Table No. 7 shows the death rates for Governorates and Provinces 1939–1938. It will be observed from table No. 3 that the death rate in 1948 was highest during the third quarter of the year reaching its maximum of 27.4 per thousand population in July. Table No. 5 gives the monthly death rates and the lowest rate was during the first quarter of the year being 16.2.

##### D.—Deaths by Sex at Different Age Periods :

Table No. 9 gives the number and ratio of deaths by sex at the different age groups in 1948.

It will be seen from this table that more than half the deaths occurred in the first age group (0–4) amounting to 54.7 per cent of total deaths.

Again there were more male than female-deaths in 1948.

The ratio was 87.53 females per 100 males.

The proponderance of male mortality was significant in the (0–4) and over 50 age groups. There was an increase in the female deaths in the 85 years and over.

##### E.—Still Births (Table No. 12) :

The still birth-rate for all Egypt in 1948 was 6.9, per 1000 births.

This rate was 16.4 in the governorates, 4.3 in Lower Egypt provinces and 6.9 in Upper Egypt Provinces.

In 1947, these rates were 7.1 for all Egypt, 17.6 for the Governorates, 4.6 for Lower Egypt Provinces and 3.8 for Upper Egypt Provinces.



The high still birth-rate in the Governorates is probably due to :

(1) More accurate registration of still births in the governorates.

(2) The prevalence of venereal diseases especially Syphilis in the larger towns and ports which constitute the Governorates.

F.—*Infantile Mortality* :

The number of infantile deaths in all Egypt in 1948 was 115, 422 or 139 per thousand of live births.

In localities having health offices, 63, 516 infantile deaths were recorded or 175 per thousand live births (table No. 10).

This table shows that diarrhoea and enteritis were still the main causes of infantile deaths. Congenital debility and bronchitis come next in importance.

Table No. 11 gives the infantile deaths in different age groups in all localities having health offices. A study of this table shows that most of the deaths occur in the first month of life.

Table No. 8 shows that the highest infantile mortality rate in 1948 was in the governorates being 186 while the lowest was in Upper Egypt Provinces being 118.

This rate was 132 in Lower Egypt Provinces.

TABLE NO. 1.—ESTIMATED POPULATION BY AGE AND SEX IN 1948, AND PROPORTION PER 1,000 AT ALL AGES

Age groups										Population			Proportion per 1000 of total groups
										Males	Females	TOTAL	
0-4 years	...	...	...	...	...	...	...	...	...	1,240,700	1,348,900	2,589,600	132.4
5-9	..	...	...	...	...	...	...	...	...	1,345,100	1,367,900	2,713,000	138.7
10-14	..	...	...	...	...	...	...	...	...	1,251,700	1,091,100	2,342,800	119.8
15-19	..	...	...	...	...	...	...	...	...	865,900	786,500	1,652,400	84.5
20-24	..	...	...	...	...	...	...	...	...	655,200	702,200	1,357,400	69.4
25-29	..	...	...	...	...	...	...	...	...	748,600	861,000	1,609,600	82.3
30-34	..	...	...	...	...	...	...	...	...	677,300	788,400	1,465,700	75.0
35-39	..	...	...	...	...	...	...	...	...	729,000	671,700	1,400,700	71.6
40-44	..	...	...	...	...	...	...	...	...	576,400	586,700	1,163,100	59.5
45-49	..	...	...	...	...	...	...	...	...	419,000	389,200	808,200	41.3
50-54	..	...	...	...	...	...	...	...	...	401,000	416,800	817,800	41.8
55-59	..	...	...	...	...	...	...	...	...	175,700	166,800	342,500	17.5
60-64	..	...	...	...	...	...	...	...	...	244,900	287,500	532,400	27.2
65-69	..	...	...	...	...	...	...	...	...	87,800	90,400	178,200	9.1
70-74	..	...	...	...	...	...	...	...	...	122,300	151,700	274,000	14.0
75-79	..	...	...	...	...	...	...	...	...	32,600	35,900	68,500	3.5
80-84	..	...	...	...	...	...	...	...	...	47,400	72,800	120,200	6.1
85-over	..	...	...	...	...	...	...	...	...	29,500	43,200	72,700	3.7
Not stated	...	..	...	...	...	...	...	...	...	22,100	23,900	46,000	2.4
TOTAL										9,672,200	9,882,600	19,554,800	—

**TABLE No. 2.—BIRTHS AND DEATHS AND THEIR RATES PER 1,000 OF POPULATION AND INFANTILE MORTALITY-RATE PER 1,000 BIRTHS**

Year	Live Births	Deaths	Natural Increase	Birth-rate per 1,000 pop.	Death rate per 1,000 pop.	Inf. Mortality rate per 1,000 births
1937 ... ..	694,086	434,208	259,878	43·5	27·2	165
1938 ... ..	704,376	429,248	275,128	43·4	26·4	163
1939 ... ..	696,746	429,033	267,713	42·2	26·0	161
1940 ... ..	697,700	444,448	253,252	41·6	26·5	162
1941 ... ..	695,016	440,981	254,035	40·8	25·9	150
1942 ... ..	658,324	494,358	163,966	38·2	28·7	168
1943 ... ..	689,771	492,644	197,127	39·6	28·3	160
1944 ... ..	722,166	472,234	249,932	41·0	26·8	152
1945 ... ..	787,502	512,003	275,499	43·9	28·6	153
1946 ... ..	774,152	469,382	304,770	42·6	25·8	141
1947 ... ..	834,557	408,577	425,980	43·5	21·3	127
1948 ... ..	832,728	397,976	434,752	42·5	20·3	139



TABLE No. 3.—QUARTERLY DISTRIBUTION OF DEATHS AND DEATH-RATES PER 1,000 OF POPULATION  
FOR ALL EGYPT 1939-1948

Years	Male Deaths				Female Deaths				Total Number of Deaths				Annual Death-Rates per 1,000 persons living			
	Quarter ended				Quarter ended				Quarter ended				Quarter ended			
	March	June	September	December	March	June	September	December	March	June	September	December	March	June	September	December
1939...	47,310	59,061	67,587	57,470	39,207	50,643	59,492	48,263	86,517	109,704	127,079	105,733	20.7	26.0	30.5	25.4
1940...	51,095	67,263	64,498	57,148	43,357	57,799	56,326	46,962	94,452	125,062	120,824	104,110	22.6	29.9	28.6	24.6
1941...	48,979	63,062	68,650	58,503	40,231	59,768	59,361	47,427	89,210	117,830	128,011	105,930	21.2	27.8	29.8	24.7
1942...	57,024	78,544	70,071	62,740	47,208	68,590	51,874	50,307	104,232	147,134	129,945	113,047	24.5	34.3	29.9	26.0
1943...	58,690	69,137	71,461	70,096	47,015	58,712	61,239	56,294	105,705	127,849	132,700	126,390	24.6	29.4	30.2	28.8
1944...	61,059	69,029	70,457	57,025	48,733	59,308	60,175	46,448	109,793	128,337	130,632	103,473	25.0	29.2	29.4	23.3
1945...	55,687	69,307	85,914	66,032	44,935	60,612	75,509	54,007	100,622	129,919	161,423	120,039	22.8	29.1	35.7	26.6
1946...	71,014	72,047	64,521	53,089	51,415	61,661	55,845	44,790	117,429	133,708	120,366	97,879	26.3	31.3	26.3	31.4
1947...	43,030	49,577	60,302	67,938	35,468	42,657	52,105	57,500	78,498	92,234	112,407	125,438	16.6	19.3	23.3	26.0
1948...	42,411	52,638	66,696	50,473	36,494	47,616	60,151	41,497	78,905	100,254	126,847	91,970	16.2	20.6	25.6	18.6

**TABLE No. 4.—MONTHLY DISTRIBUTION OF BIRTHS AND DEATHS AND RATES PER 1,000 OF  
POPULATION EGYPT 1948**

Months	Births			Birth rate per 1000 pop.	Deaths			Death rate per 1,000 pop.
	Males	Females	TOTAL		Males	Females	TOTAL	
January ... ..	41,897	37,175	79,072	47·6	14,355	12,083	26,438	15·9
February... ..	36,363	33,234	69,597	44·8	13,743	11,763	25,506	16·4
March ... ..	38,034	34,716	72,750	43·8	14,313	12,648	26,961	16·2
April ... ..	35,678	32,899	68,577	42·7	13,085	11,706	24,791	15·4
May ... ..	33,664	30,519	64,183	38·6	17,555	15,725	33,280	20·0
June ... ..	33,993	30,976	64,969	40·4	21,998	20,185	42,183	26·2
July ... ..	36,197	33,095	69,292	41·7	23,651	21,836	45,487	27·4
August ... ..	35,471	32,572	68,044	41·0	23,742	21,074	44,816	27·0
September ... ..	33,801	31,034	64,835	40·3	19,303	17,241	36,544	22·7
October ... ..	35,143	32,263	67,406	40·6	17,421	14,544	31,965	19·2
November ... ..	34,563	32,451	67,014	41·7	16,053	13,128	29,181	18·2
December ... ..	39,072	37,915	76,987	43·0	16,999	13,825	30,824	18·6
<b>TOTAL ... ..</b>	<b>433,878</b>	<b>398,850</b>	<b>832,728</b>	<b>42·5</b>	<b>212,218</b>	<b>185,758</b>	<b>397,976</b>	<b>20·3</b>

**TABLE No. 5.—MONTHLY DEATH-RATE PER 1,000 POPULATION**

Month	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
January ... ..	24·1	25·8	33·3	24·6	26·0	28·0	23·6	25·8	19·0	15·9
February ... ..	18·7	19·9	19·1	24·1	21·7	23·3	20·9	24·5	15·9	16·4
March ... ..	20·1	21·8	20·6	23·8	25·1	23·4	22·8	27·3	14·8	16·2
April ... ..	21·0	25·5	22·6	27·8	26·0	25·3	21·9	27·1	16·3	15·4
May ... ..	27·9	31·8	29·4	34·2	30·3	29·2	29·1	30·3	18·8	20·0
June ... ..	30·9	32·1	31·1	39·5	31·8	32·9	36·1	30·9	22·9	26·2
July ... ..	34·9	32·7	32·3	33·9	23·8	33·7	39·1	29·0	25·5	27·4
August ... ..	31·4	29·0	31·8	28·1	31·3	29·9	37·3	26·5	23·3	27·0
September ... ..	26·1	24·7	26·1	24·8	26·3	25·2	31·5	24·1	21·0	22·7
October ... ..	24·9	24·0	24·7	25·1	29·5	24·3	27·7	22·7	38·2	19·2
November ... ..	25·0	24·2	24·5	25·4	27·5	23·3	25·0	20·1	22·9	18·2
December ... ..	27·0	26·3	25·4	25·6	30·0	22·8	27·7	22·0	16·7	18·6
<b>TOTAL ... ..</b>	<b>26·0</b>	<b>26·5</b>	<b>25·9</b>	<b>28·7</b>	<b>28·3</b>	<b>26·8</b>	<b>28·7</b>	<b>25·8</b>	<b>21·3</b>	<b>20·3</b>



TOTAL EGYPT

TABLE No. 6.—BIRTHS, DEATHS AND INFANTILE MORTALITY BY GOVERNORATES AND PROVINCES, EGYPT 1939—1948

Localities	1939			1940			1941			1942			1943		
	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. N.	Birth	Death	Inf. M.
Cairo ...	60,708	34,725	11,550	59,427	36,859	11,685	62,774	40,165	12,441	65,231	52,081	16,159	76,148	54,065	18,023
Alexandria ...	29,689	17,149	5,851	27,293	16,321	5,130	20,414	16,972	3,945	25,205	18,475	5,149	32,986	24,313	8,259
Ismailia ...	2,717	1,282	412	2,909	1,464	502	2,303	2,208	443	2,412	2,086	473	3,605	2,411	678
Port Saïd ...	5,023	3,075	813	5,090	2,389	663	4,243	2,905	739	5,173	3,561	952	6,207	3,393	1,132
Damietta ...	1,795	948	268	1,795	951	287	2,057	1,018	286	1,853	1,291	322	1,833	977	276
Suez ...	2,793	1,597	649	3,046	1,578	588	2,585	2,253	615	3,544	2,982	395	4,756	4,118	1,251
Frontier Districts ...	5,025	2,279	702	4,460	2,491	605	3,890	3,746	825	3,829	2,756	631	4,232	2,783	738
Behera ...	41,591	24,732	4,888	41,084	26,352	5,191	42,770	28,744	5,206	40,592	28,479	4,898	41,465	26,182	4,507
Dakahlia ...	58,664	37,388	9,379	59,350	39,385	9,684	60,776	40,318	9,529	54,709	45,622	9,357	55,825	41,245	8,242
Gharbia ...	88,935	55,611	13,161	89,384	59,254	13,457	92,553	56,442	11,761	83,155	63,456	12,139	85,688	60,778	11,703
Menoufia ...	51,827	3,541	8,714	52,616	38,975	9,747	54,362	35,898	8,442	48,233	40,580	9,389	50,660	37,976	8,370
Kalubia ...	27,879	18,804	4,731	27,964	20,523	5,091	28,911	19,681	4,634	27,391	21,929	4,902	29,800	19,589	4,813
Sharkia ...	48,385	29,973	6,655	48,523	29,565	6,507	48,703	31,501	6,603	48,171	32,808	6,536	49,840	31,498	6,288
Aswan ...	10,751	6,779	1,377	10,897	7,752	1,572	11,167	7,731	1,482	9,915	10,963	1,558	6,456	14,943	1,386
Assiut ...	53,908	35,568	9,408	54,731	34,380	8,994	52,986	33,410	8,186	49,279	36,790	8,164	47,866	33,789	7,098
Beni-Snef ...	23,009	13,713	3,511	22,859	12,788	3,148	22,292	11,862	2,657	21,282	14,144	3,070	22,175	14,000	3,070
Fayoum ...	27,911	20,614	6,445	26,661	18,743	5,700	26,451	17,818	5,353	25,955	18,405	5,097	26,041	18,132	4,926
Gerga ...	49,019	25,278	6,182	49,927	28,128	6,584	47,968	25,480	5,611	42,963	28,445	5,255	41,319	27,901	4,690
Giza ...	33,917	19,861	5,862	34,133	21,275	6,067	33,981	20,796	5,363	32,277	25,353	6,327	34,145	24,230	5,882
Minia ...	59,167	25,938	7,333	39,676	26,113	7,315	39,503	23,316	6,312	36,697	25,484	6,207	38,104	25,944	6,269
Qena ...	34,033	18,248	4,433	35,728	19,162	4,393	34,013	18,717	3,969	30,459	18,668	3,357	30,630	24,377	2,914
TOTAL ...	696,746	429,033	112,324	697,00	444,448	112,910	695,016	440,981	104,402	658,324	494,358	110,847	689,771	492,644	110,520



TABLE 6.— BIRTHS, DEATHS AND INFANTILE MORTALITY BY GOVERNORATES AND PROVINCES 1939—1948. (Contd.)

Localities	1944			1945			1946			1947			1948		
	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.
Cairo ...	85,788	53,583	18,420	90,467	50,559	18,749	94,831	52,511	19,006	99,866	44,196	17,213	100,005	52,672	19,940
Alexandria ...	39,847	22,487	8,661	42,816	26,764	10,355	44,860	20,540	8,391	46,231	22,380	8,860	48,374	20,436	8,472
Ismailia ...	4,250	2,632	780	4,564	2,344	766	4,579	2,255	745	5,119	2,597	771	5,701	2,584	914
Port Said ...	7,852	4,075	1,456	7,723	3,942	1,445	7,608	3,388	1,217	8,594	3,165	1,105	8,070	3,513	1,116
Danietta ...	2,365	971	348	2,610	1,270	481	2,580	1,001	353	2,798	1,103	367	2,803	991	305
Suez ...	5,112	4,439	1,447	5,635	3,612	1,373	5,546	3,255	1,166	5,757	2,624	1,023	6,183	3,054	1,165
Frontier Districts ...	5,283	2,796	716	5,990	2,757	779	6,411	3,075	995	7,177	2,675	855	6,800	2,733	927
Behera... ..	44,383	26,396	4,728	50,709	28,886	5,300	49,091	25,743	4,753	49,796	25,861	5,516	50,776	21,285	4,955
Dakahlia ...	60,961	35,227	8,644	65,092	43,323	10,333	63,688	37,106	8,625	67,008	38,385	8,258	69,363	31,981	9,421
Gharbia ...	91,008	54,444	11,753	96,485	65,376	13,254	98,428	56,573	11,797	102,185	57,732	11,070	107,125	46,709	13,116
Menoufia ...	49,801	38,515	8,513	52,051	39,751	8,512	50,115	38,966	78,853	55,843	32,727	7,926	56,025	31,605	9,216
Kaliubia ...	29,331	19,785	4,759	32,324	21,199	5,023	31,974	20,980	4,690	34,093	17,475	4,526	34,919	19,467	5,808
Sharkia ...	50,957	32,430	5,641	53,844	35,354	6,715	53,377	32,647	6,406	52,557	32,073	6,070	56,424	28,320	7,016
Aswan ...	5,696	9,243	769	12,461	6,054	1,272	10,635	5,225	1,173	11,343	5,188	1,255	10,734	5,012	1,246
Assiut ...	48,916	32,957	6,814	53,322	41,841	7,455	52,048	35,562	6,753	55,383	25,426	6,557	53,562	26,843	6,098
Beni-Suef ...	22,402	13,112	2,807	22,069	17,436	3,128	24,071	13,698	2,586	26,010	11,465	2,607	24,780	11,329	2,746
Fayoum ...	26,227	19,787	5,021	27,582	19,465	5,156	25,930	18,926	4,326	31,665	14,975	4,388	27,994	16,425	4,255
Gerga ...	42,667	23,566	3,981	44,217	24,560	3,946	41,809	25,952	3,900	46,602	16,975	3,397	43,335	18,008	3,439
Giza ...	35,793	22,766	6,012	38,838	24,827	6,312	36,274	27,016	6,368	43,682	19,799	5,943	41,165	21,180	6,465
Minia ...	39,394	26,636	6,199	42,202	36,006	7,193	36,519	26,938	4,847	47,085	18,921	5,332	44,530	20,897	5,696
Qena ...	24,399	26,395	2,551	36,501	16,647	2,819	33,778	18,025	3,041	35,760	12,830	2,782	34,060	13,432	3,115
<b>TOTAL ...</b>	<b>722,166</b>	<b>472,234</b>	<b>116,020</b>	<b>787,502</b>	<b>512,603</b>	<b>120,366</b>	<b>774,152</b>	<b>469,382</b>	<b>109,023</b>	<b>834,557</b>	<b>408,577</b>	<b>105,821</b>	<b>832,728</b>	<b>397,976</b>	<b>115,422</b>

TABLE No. 7.—BIRTH, DEATH AND INFANTILE MORTALITY—RATES BY GOVERNORATES AND PROVINCES 1939-1948

Localities	1939			1940			1941			1942			1943		
	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.
Cairo ... ..	45.0	25.8	190	43.3	26.8	197	45.0	28.8	198	46.3	36.9	247	53.1	37.7	237
Alexandria ... ..	41.8	24.1	197	37.7	22.3	188	28.0	23.3	193	34.3	25.2	204	44.4	32.7	250
Ismailia ... ..	50.8	23.8	168	53.2	26.9	186	68.6	42.9	235	44.7	38.5	214	61.4	41.1	188
Port-Saïd ... ..	38.9	24.1	166	38.7	18.1	131	31.5	21.6	169	38.3	26.5	183	44.9	24.6	182
Damietta ... ..	42.5	22.5	149	45.1	22.2	148	46.5	23.0	139	41.1	28.8	174	40.1	21.4	151
Suez ... ..	54.1	32.1	245	57.7	30.5	204	47.3	44.0	254	66.1	58.1	288	84.9	73.5	263
Frontier Districts ... ..	37.7	18.0	140	38.1	31.3	136	35.6	31.6	116	32.2	23.3	165	35.3	23.2	174
Bohera ... ..	37.9	22.5	118	36.9	23.6	126	37.9	25.5	122	30.7	25.0	121	35.9	22.7	109
Dakahlia ... ..	46.3	29.5	160	46.0	30.5	163	46.4	30.8	157	41.3	34.5	171	41.8	31.9	148
Charbia ... ..	43.6	27.3	148	43.9	28.6	151	43.9	36.3	127	39.1	32.9	146	39.7	28.2	137
Menoufia ... ..	43.4	29.7	168	43.6	32.3	185	44.4	29.3	155	38.9	29.7	195	40.6	30.4	165
Kalubia ... ..	44.5	30.0	170	43.7	32.1	182	44.5	30.3	160	41.8	33.5	119	44.8	29.5	162
Sharkia ... ..	42.1	26.1	138	41.6	35.3	134	41.1	26.6	136	40.1	27.3	136	40.9	25.8	126
Aswan ... ..	34.5	21.7	128	54.5	24.6	144	35.1	24.3	133	30.8	34.1	157	20.3	47.1	215
Assiut ... ..	43.1	23.4	175	43.1	27.0	164	41.0	25.9	154	37.7	28.1	166	36.2	25.6	148
Port-Suef ... ..	39.5	23.6	153	38.7	21.6	138	37.1	19.7	119	34.9	23.2	144	35.9	22.7	138
Fayoum ... ..	45.3	33.4	231	42.7	30.0	214	41.8	28.1	202	40.5	28.7	196	40.1	27.9	189
Gerga ... ..	41.8	21.6	126	41.8	23.5	132	39.4	21.9	117	34.8	23.0	122	33.1	22.3	114
Giza ... ..	47.1	27.1	173	46.4	28.9	178	45.4	27.8	158	42.6	33.5	196	44.5	31.6	172
Minia ... ..	40.8	27.1	187	40.8	26.8	184	40.0	23.6	160	36.6	25.4	169	37.6	25.6	165
Qena ... ..	32.3	17.3	130	33.3	17.9	123	31.2	17.2	117	27.6	16.9	110	27.5	21.9	95
TOTAL ... ..	42.2	26.0	160	41.6	26.5	162	40.8	25.9	150	38.2	28.7	168	39.6	28.3	160



TABLE No. 7—BIRTH, DEATH AND INFANTILE MORTALITY-RATES BY GOVERNORATES AND PROVINCES 1939—1948 (contd.)

Localities	1944			1945			1946			1947			1948		
	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.	Birth	Death	Inf. M.
Cairo ...	58.9	36.8	215	60.5	33.8	207	61.9	34.3	200	47.5	21.0	172	46.8	24.7	199
Alexandria ...	52.7	29.7	217	55.5	34.7	242	66.6	25.9	187	49.8	24.1	192	50.7	21.4	175
Ismailia ...	70.9	43.9	184	73.7	37.9	168	71.2	35.0	162	74.9	38	151	50.9	23.1	160
Port Saïd ...	53.8	28.9	192	53.4	27.5	187	51.1	22.7	159	48.1	17.7	129	43.1	19.1	138
Damietta ...	50.8	20.9	147	54.3	26.4	184	52.1	20.2	136	52.1	20.5	131	40.3	17.8	109
Suez ...	90.6	78.7	243	97.3	63.4	244	92.4	54.2	210	53.1	24.2	178	55.1	27.2	187
Frontier Districts ...	43.2	22.8	135	48.0	22.1	130	50.0	23.9	155	42.8	15.9	119	39.3	15.8	136
Behera...	37.9	22.5	107	42.8	24.2	105	40.6	21.3	97	40.0	20.8	111	39.7	16.6	98
Dakahlia ...	45.0	26.0	142	47.1	31.3	159	45.5	26.5	135	47.3	27.1	123	47.6	22.0	136
Gharbia ...	41.6	24.9	129	43.4	29.4	137	43.7	25.1	119	43.7	24.7	108	44.6	19.5	122
Menoufia ...	39.6	30.6	171	40.9	31.2	164	39.2	30.5	175	47.7	28.0	142	46.7	26.4	164
Kalubia ...	43.6	29.4	162	47.7	30.4	100	46.1	30.3	146	49.6	25.4	133	48.9	27.3	166
Sharkia ...	41.2	26.2	111	42.8	28.1	125	42.0	25.7	120	38.7	23.6	115	41.9	21.0	124
Aswan ...	18.6	30.1	143	40.0	19.5	102	33.7	16.5	110	39.6	18.1	111	36.1	16.9	116
Assiut ...	36.6	24.7	139	39.4	30.9	140	38.3	26.2	129	40.1	18.4	118	38.0	18.7	113
Beni-Suef ...	35.8	20.9	125	34.8	27.5	142	37.7	41.4	107	42.4	18.6	100	39.4	18.0	111
Fayoum ...	40.0	30.1	191	41.5	29.3	187	38.8	28.3	166	47.1	22.2	139	40.6	23.8	152
Gerga ...	33.7	18.6	93	34.3	19.1	89	32.1	19.9	93	36.1	13.1	73	32.7	13.6	79
Giza ...	46.1	29.2	168	48.9	31.3	163	45.2	33.7	175	53.1	24.1	136	46.8	24.1	157
Minia ...	38.3	25.9	157	40.6	34.6	170	35.2	25.9	132	44.3	17.8	113	41.4	19.4	128
Qena ...	22.0	23.8	105	32.5	14.8	77	29.7	15.8	90	32.3	11.5	78	30.1	11.9	91
TOTAL ...	41.0	26.8	152	43.9	28.6	153	42.6	25.8	141	43.5	21.3	127	42.5	20.3	139

TABLE No. 8.—BIRTHS, DEATHS, INFANTILE MORTALITY AND RATES BY GOVERNORATS AND PROVINCES.  
EGYPT 1948

Localities	Births	Birth rate per 1000 pop.	Deaths	Death rate per 1000 pop.	Infantile Mortality	Inf. M. rate per 1000 births
Cairo ... ..	100,005	46·8	52,672	24·7	19,940	199
Alexandria ... ..	48,374	50·7	20,436	21·4	8,472	175
Ismailia ... ..	5,701	50·9	2,584	23·1	914	160
Port-Saïd ... ..	8,070	43·8	3,513	19·1	1,116	138
Damietta ... ..	2,803	50·3	991	17·8	305	1·9
Suez ... ..	6,183	55·1	3,054	27·2	1,156	187
Governorates ... ..	<b>171,136</b>	<b>48·2</b>	<b>83,250</b>	<b>23·4</b>	<b>31,903</b>	<b>186</b>
Frontier Districts ... ..	6,800	39·3	2,733	15·8	927	136
Behera ... ..	50,776	39·7	21,285	16·6	4,955	98
Dakahlia ... ..	69,363	47·7	31,981	22·0	9,421	136
Gharbia ... ..	107,125	44·6	46,709	19·5	13,116	122
Menoufia ... ..	56,025	46·7	31,605	26·4	9,216	164
Kaliubia ... ..	34,919	48·9	19,467	27·3	5,808	166
Sharkia ... ..	56,424	41·9	28,320	21·0	7,016	124
Lower Egypt ... ..	<b>374,632</b>	<b>44·6</b>	<b>179,367</b>	<b>31·4</b>	<b>49,532</b>	<b>132</b>
Aswan ... ..	10,734	36·1	5,012	16·9	1,246	116
Assiut ... ..	53,562	38·0	26,343	18·7	6,098	113
Beni Suef ... ..	24,780	39·4	11,329	18·0	2,746	111
Fayoum ... ..	27,994	40·6	16,425	23·8	4,255	152
Gerga ... ..	43,335	32·7	18,008	13·6	3,439	79
Giza ... ..	4,115	46·8	21,180	24·1	6,465	157
Minia ... ..	44,530	41·4	20,897	19·4	5,696	128
Qena ... ..	34,060	30·1	13,432	11·9	3,115	91
Upper Egypt ... ..	<b>280,160</b>	<b>37·7</b>	<b>132,626</b>	<b>17·8</b>	<b>33,060</b>	<b>118</b>
TOTAL ... ..	<b>832,728</b>	<b>42·5</b>	<b>397,976</b>	<b>20·3</b>	<b>115,422</b>	<b>139</b>



TABLE NO. 9.—DEATHS BY AGE GROUPS, SEX AND RATE PER 1000 POP. 1948

Age Groups	Males	Rate	Females	Rate	Total	Rate	Male proportion per cent	Female proportion per cent	Death rate per cent of total
0- 4 ... ..	113,379	91·7	104,288	77·3	217,667	84·1	53·4	56·2	54·7
5- 9 ... ..	9,059	6·7	7,266	5·3	16,325	6·0	4·3	3·9	4·1
10-14 ... ..	4,418	3·5	3,042	2·8	7,460	3·2	2·1	1·6	1·8
15-19 ... ..	3,895	4·5	2,489	3·2	6,384	3·9	1·8	1·3	1·5
20-24 ... ..	3,668	5·6	2,262	3·2	5,930	4·4	1·7	1·2	1·5
25-29 ... ..	4,419	5·9	3,301	3·8	7,720	4·8	2·1	1·8	1·9
30-34 ... ..	4,756	7·0	3,754	4·8	8,510	5·8	2·2	2·0	2·1
35-39 ... ..	5,589	7·7	3,566	5·3	9,155	6·5	2·6	1·9	2·3
40-44 ... ..	6,145	10·7	3,907	6·7	10,052	8·6	2·9	2·1	2·5
45-49 ... ..	5,253	12·5	2,643	6·8	7,896	9·8	2·5	1·4	1·9
50-54 ... ..	7,289	18·2	4,555	10·9	11,844	14·5	3·4	2·5	2·9
55-59 ... ..	3,590	20·4	1,660	9·9	5,250	15·3	1·7	0·9	1·3
60-64 ... ..	7,429	30·3	4,824	16·8	12,253	42·6	3·5	2·6	3·0
65-69 ... ..	4,364	49·4	2,511	27·8	6,875	38·6	2·1	1·4	1·8
70-74 ... ..	7,522	61·5	6,410	42·3	13,932	50·8	3·5	3·5	3·5
75-79 ... ..	3,232	99·1	2,542	70·8	5,774	84·3	1·5	1·4	1·5
80-84 ... ..	6,461	136·4	8,024	110·2	14,485	120·5	3·0	4·3	3·6
85 and over ...	11,346	384·4	18,468	427·5	29,814	410·5	5·3	9·9	7·6
Not Stated ...	404	18·3	246	10·3	650	14·1	0·2	0·1	0·15
<b>TOTAL ...</b>	<b>212,218</b>	<b>21·9</b>	<b>185,758</b>	<b>18·8</b>	<b>397,976</b>	<b>20·3</b>	<b>0</b>	<b>0</b>	<b>0</b>

TABLE No. 10.— INFANTILE MORTALITY AND RATES BY CAUSES OF DEATH IN ALL LOCALITIES WITH HEALTH BUREAUS 1939-1948.

Diseases of Infancy	Mortality										Rates per 1000 Live Births									
	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Measles ... ..	255	278	228	395	99	262	151	360	200	338	1.1	1.2	.981	1.6	.365	.877	.468	1.1	.566	.933
Whooping Cough ...	16	14	22	28	43	32	28	13	18	11	.068	.059	.095	.115	.159	.107	.087	.040	.051	.030
Diphtheria ... ..	28	37	70	68	81	59	85	59	57	67	.120	.156	.301	.279	.299	.198	.264	.180	.161	.185
Tuberculous Diseases	8	12	5	13	19	24	11	23	14	18	.034	.051	.022	.053	.070	.080	.034	.070	.040	.050
Syphilis ... ..	274	240	161	150	234	165	130	135	121	147	1.2	1.0	.692	.616	.864	.552	.403	.413	.343	.406
Rickets and Osteo- malacia ... ..	249	227	189	189	183	180	176	128	132	221	1.0	.958	.814	.776	.676	.603	.546	.391	.374	.610
Convulsions ... ..	144	154	173	198	200	252	213	134	98	80	.615	.65	.745	.813	.738	.844	.660	.410	.277	.221
Bronchitis ... ..	2,620	3,089	3,195	3,636	3,522	3,705	4,211	3,742	3,947	5,574	11.2	13.0	13.8	14.9	13.0	12.4	13.1	11.4	11.2	15.4
Broncho-Pneumonia	2,310	1,749	794	936	1,036	1,095	959	1,145	950	874	9.9	7.4	3.4	3.8	3.8	3.7	3.0	3.5	2.7	2.4
Pneumonia ... ..	1,223	645	200	277	301	347	393	497	536	606	5.2	2.7	.861	1.1	1.1	1.2	1.2	1.5	1.5	1.7
Diarrhoea and En- teritis ... ..	23,979	25,279	25,325	31,099	33,230	33,647	37,173	34,086	33,030	32,460	102.5	106.4	109.0	127.6	122.7	112.6	1152.	104.2	93.5	89.6
Congenital Defects of Conformation...	62	71	73	81	78	137	199	150	91	164	.265	.300	.314	.332	.288	.459	6.17	.458	.258	45.3
Congenital Debility	13,517	13,107	13,007	14,773	16,895	17,881	20,318	18,786	18,191	21,344	57.8	55.3	56.0	60.6	62.4	59.6	6.03	57.4	51.5	58.9
Premature Birth ...	170	234	165	168	195	151	138	167	123	152	.727	.988	.710	.690	.720	.505	.397	.510	.348	.420
Consequences of Delivery ... ..	62	63	66	47	80	74	113	132	138	115	.265	.266	.284	.192	.295	.248	.350	.403	.391	.318
Infanticide ... ..	149	133	168	161	126	119	86	100	72	82	.637	.561	.723	.661	.465	.398	.267	.306	.204	.226
Accidents ... ..	138	106	152	109	96	122	113	88	109	59	.590	.447	.654	.447	.354	.408	.350	.269	.309	.163
Other Causes ... ..	1,612	1,652	1,546	1,585	1,841	1,983	1,909	1,475	1,553	1,205	6.9	7.0	6.7	6.5	6.8	6.6	5.9	4.5	4.4	3.3
TOTAL ... ..	46,816	47,090	45,539	53,913	58,259	60,235	66,396	61,220	59,380	63,516	200.1	198.8	196.0	221.3	215.1	201.6	205.8	187.1	168.1	175.3



TABLE No. 11.—INFANTILE MORTALITY BY AGE AND CAUSE IN LOCALITIES HAVING HEALTH BUREAUS 1948.

Causes of Death	Weeks					Months											TOTAL
	Below 1 week	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
Measles ... ..	0	1	0	0	0	2	11	5	9	13	19	41	64	63	66	44	338
Whooping Cough ... ..	0	1	0	0	0	0	0	0	1	1	1	2	2	1	2	0	11
Diphtheria ... ..	0	0	0	0	0	4	1	2	1	4	2	7	10	11	15	10	67
Tuberculous Diseases ... ..	0	0	1	0	1	1	1	1	0	1	1	1	6	3	1	0	18
Syphilis ... ..	52	17	5	5	0	10	9	5	3	5	5	15	8	5	2	1	147
Rickets and Osteomalacia ... ..	0	0	0	0	1	10	12	16	15	9	24	17	44	28	30	15	221
Convulsions ... ..	4	6	1	0	0	4	1	6	8	4	14	7	4	7	10	4	80
Bronchitis ... ..	33	39	42	36	1	271	379	523	567	540	702	548	689	451	452	301	5,574
Broncho-Pneumonia ... ..	12	15	8	8	0	30	63	55	97	63	105	72	120	98	74	53	874
Pneumonia ... ..	33	19	12	10	1	41	41	47	50	40	73	44	86	45	40	24	606
Diarrhoea and Enteritis... ..	98	178	188	122	22	1,354	2,069	2,956	3,414	3,324	4,022	3,392	3,946	2,969	2,649	1,764	32,460
Congenital Defects of Conformation ... ..	53	22	23	11	1	37	8	4	3	0	0	0	0	1	1	0	164
Congenital Debility ... ..	4,911	2,671	1,920	965	114	2,887	2,440	1,678	1,129	756	615	335	426	192	228	77	21,344
Premature Birth ... ..	122	12	4	4	0	2	2	0	2	1	0	1	1	1	0	0	152
Consequences of Delivery ... ..	99	5	1	0	0	0	1	0	0	0	0	0	3	6	0	0	115
Infanticide ... ..	81	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	82
Accidents ... ..	5	0	2	0	0	3	2	3	1	3	15	2	14	6	1	2	59
Other causes ... ..	166	62	30	11	3	82	60	96	77	75	137	90	150	65	66	35	1,205
TOTAL ... ..	5,669	3,048	2,237	1,172	144	4,738	5,100	5,397	5,377	4,839	5,735	4,575	5,573	3,945	3,637	2,330	63,516



TABLE No. 12—NUMBER OF STILL-BIRTHS AND RATES BY SEX FOR GOVERNORATES  
AND PROVINCES 1948.

Localities	Still Births			Still-Birth-rate*		
	Males	Females	TOTAL	Males	Females	TOTAL
Cairo ... ..	975	709	1,684	18·7	14·3	16·6
Alexandria ... ..	395	314	709	15·8	13·0	14·4
Ismailia ... ..	36	24	60	11·9	8·8	10·4
Port-Said ... ..	114	89	203	26·7	22·2	24·4
Damietta ... ..	42	35	77	28·9	24·6	26·7
Suez ... ..	87	41	128	27·3	13·1	20·3
Governorates ... ..	1,649	1,212	2,861	44·7	34·3	16·4
Frontier Districts ... ..	61	26	87	17·2	7·8	12·6
Behera ... ..	105	73	178	4·0	2·9	3·5
Dakahlia ... ..	208	145	353	5·8	4·3	5·1
Gharbia ... ..	264	216	480	4·8	4·1	4·5
Menoufia ... ..	168	124	292	5·8	4·5	5·2
Kaliubia ... ..	82	51	133	4·5	3·0	3·8
Sharkia ... ..	109	75	184	3·7	2·8	3·3
Lower Egypt ... ..	936	684	1,620	4·8	3·7	4·3
Aswan ... ..	33	21	54	5·0	4·1	5·0
Asiut ... ..	133	88	221	4·6	3·5	4·1
Beni Suef ... ..	99	67	166	7·4	5·8	6·7
Fayoum ... ..	90	66	156	6·1	5·0	5·5
Gerga ... ..	89	61	150	3·7	3·2	3·4
Giza ... ..	140	98	238	6·4	5·0	5·7
Minia ... ..	106	68	174	4·6	3·2	3·9
Qena ... ..	55	38	93	2·9	2·5	2·7
Upper Egypt ... ..	745	507	1,252	4·9	3·9	6·9
TOTAL ... ..	3,391	2,429	5,820	7·8	6·1	6·9

\* per 1000 total births.

## Chapter II.—Infectious Diseases

A total of 44,522 cases of infectious diseases with 12,150 deaths were notified throughout Egypt during 1948 or a case-rate of 228 and a death-rate of 62.1 per 100,000 population as compared with 51,722 cases with 11,247 deaths notified during 1947 or a case-rate of 270 and a death rate of 59 per 100,000 population.

The decrease was due to the incidence of fewer cases of Malaria, Whooping-cough, Pneumonia, Influenza, Measles, Mumps, Pulmonary tuberculosis, Relapsing fever and Small-Pox.

No cases or deaths of Plague occurred during the year. 6 cases of relapsing fever with no deaths were notified in 1948, all of which occurred in Behera province. The following is a detailed study of the more important diseases.

### *Typhus fever :*

TABLE No. 13.—CASES, DEATHS AND RATES OF TYPHUS FEVER 1944-1948

Year	Cases	Case-rates per 100,000 population	Deaths	Death-rates per 100,000 population	Case-fatality rates per cent
1944 ... ..	18,477	104.8	4,043	22.9	21.9
1945 ... ..	18,283	102.0	3,627	20.2	19.8
1946 ... ..	1,548	8.5	337	1.9	21.8
1947 ... ..	173	0.9	53	0.3	28.9
1948 ... ..	325	1.7	71	0.4	21.8

It is observed from the above table that the case-rate this year is nearly twice the rate in 1947 though it is comparatively much lower than rates of previous years.

The relative rise in the incidence of typhus may be attributed to the suspension of the routine dusting of the population with D.D.T. as from the last quarter of 1947 until the second half of 1948 following the outbreak of the cholera epidemic and the new control measures taken against it.

It will be seen that the highest incidence was recorded in the second quarter of the year which is the epidemic season of typhus in Egypt.

### *Small-Pox:*

TABLE No. 14.—CASES, DEATHS AND RATES OF SMALL-POX 1944-1948

Year	Cases	Case-rates per 100,000 population	Deaths	Death-rates per 100,000 population	Case-fatality rates per cent
1944 ... ..	11,194	63.5	1,016	5.8	9.1
1945 ... ..	1,355	7.6	115	0.6	8.5
1946 ... ..	416	2.2	50	0.3	12.5
1947 ... ..	170	0.9	18	0.1	10.6
1948 ... ..	16	0.08	4	0.02	25.0

The above table shows that there has been a steady fall in the incidence of Small-Pox since 1942. This was due to the four year vaccination scheme of the whole population which was started in 1945.



Table No. 23 gives a quarterly distribution of small-pox cases and deaths according to governorates and provinces with ratios per 100,000 of population.

*Anti Small-Pox Vaccination :*

A total of 4,166,289 persons were vaccinated in 1948 under the 4-year scheme. (Table No. 30).

*Cerebro Spinal Meningitis — (Tables Nos. 15. and 26).*

133 cases with 37 deaths were reported during the year or a case-rate of 0.7 and a death - rate of 0.189 per 100,000 population and a case-fatality-rate of 27.8% as against 94 cases with 32 deaths in 1947 i.e. a case-rate of 0.49 and a death-rate of 0.167 per 100,000 population and a case-fatality-rate of 34%. Most of the cases were recorded in Port-Said and Cairo.

*Diphtheria (Tables Nos. 15 and 25).*

1,835 cases of Diphtheria with 659 deaths were reported during the year or a case-rate of 9.4 and a death-rate of 3.4 per 100,000 population and a case-fatality-rate of 35.9% as compared with 1809 cases with 591 deaths in 1947 or a case-rate of 9.5 and a death-rate of 3.1 per 100,000 population and a case-fatality-rate of 32.1%.

Compared with 1947, there were more cases recorded this year in Suez, Port-Said, Ismailia and Damietta. Alexandria and Dakahlia Province had fewer cases (Tables Nos. 17 and 18).

*Anti Diphtheria Immunization. (Table No. 30).*

205,115 children between one and 10 years of age received anatoxin injections.

*Typhoid and Paratyphoid Fever (Tables Nos. 15 and 24).*

During the year, a total of 5,513 cases with 814 deaths were reported from all Egypt, or a case-rate of 28.3 and a death-rate of 4.1 per 100,000 population and a case - fatality-rate of 14.7% as compared with 4,601 cases and 685 deaths in 1947 or a case-rate of 24 and a death-rate of 3.6 per 100,000 population and a case-fatality-rate of 14.6%. As compared with 1947, there was a noticeable rise in the case-rate of typhoid in Alexandria and Cairo and a decline in Port-Said (Tables 17 and 18).

*Anti Typhoid Vaccination (Table No. 30).*

A total of 242,824 persons were vaccinated during the year.

*Measles (Tables Nos. 15 and 28).*

A total of 6,485 cases of Measles with 2,408 deaths were recorded during the year or a case-rate of 33.2 and a death-rate of 12.3 per 100,000 population and a case-fatality-rate of 36.7% as against 6,886 cases and 1,336 deaths during 1947 or a case-rate of 36 and a death-rate of 7 per 100,000 population and a case-fatality-rate of 19.3%.

Table No. 18 gives the case-rate per 100,000 population for every governorate and province in 1947 and 1948 for purposes of comparison.

*Control of Pilgrims :*

21,384 Egyptian pilgrims proceeded to the Hedjaz this year of whom 126 died there. 33 of those who returned died within one month of their return.

*Infectious Diseases Hospitals :*

Up till the end of 1948, there were 23 isolation hospitals in governorates and Bandar towns and 38 village isolation shelters.

Of 54,627 patients admitted to these hospitals, 47,240 recovered, 4,862 improved and 2,525 died.



TABLE No 15.—CASES AND DEATHS OF INFECTIOUS DISEASES NOTIFIED DURING THE YEARS 1939—1948

Diseases	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Plague... { C } ... { D }	169 59	1,491 238	14 6	15 10	163 111	644 393	218 108	211 57	15 5	0 0
Typhus { C } ... { D }	4,296 788	4,416 863	9,414 1,751	22,054 4,411	40,182 8,252	18,477 4,043	18,283 3,627	1,548 337	173 53	325 71
Small-Pox { C } ... { D }	0 0	2 0	0 0	0 0	4,138 384	11,194 1,016	1,355 115	416 50	170 18	16 4
Typhoid { C } ... { D }	4,686 1,121	4,841 934	5,758 1,179	6,814 1,257	4,431 790	5,019 790	5,289 833	4,584 637	4,601 685	5,513 814
Scarlet Fever { C } ... { D }	81 5	105 3	91 0	39 2	54 3	30 0	12 1	11 0	10 2	9 0
Cerebro Spinal Meningitis... { C } ... { D }	243 137	191 96	159 94	212 101	114 57	147 75	65 49	88 44	94 32	133 37
Diphtheria { C } ... { D }	1,962 905	2,433 1,178	4,037 1,932	3,950 1,882	4,143 1,595	3,326 12,64	3,130 1,159	2,047 823	1,809 591	1,835 659
Measles { C } ... { D }	10,588 2,795	14,697 3,581	9,769 2,870	9,764 3,654	4,249 1,022	7,274 2,475	5,444 1,413	6,968 1,826	6,886 1,336	6,485 2,408
Pulmonary Tuberculosis { C } ... { D }	6,326 2,652	6,236 2,786	6,296 3,021	6,608 3,472	6,770 3,647	6,950 3,803	6,819 3,681	6,407 3,671	6,523 3,581	6,614 3,718
Acute Pneumonia { C } ... { D }	0 0	3,545 4,939	5,414 4,843	6,215 5,296	6,935 5,762	6,929 5,242	5,805 4,848	5,420 4,432	5,797 3,948	5074 3,561
Chicken Pox { C } ... { D }	1,817 22	1,351 15	1,862 15	870 8	1,238 21	1,057 15	1,338 12	873 11	1,755 7	1,722 1
Puerperal Septicaemia { C } ... { D }	463 321	489 340	461 344	332 208	375 187	375 159	387 178	266 145	310 101	296 94



[illegible]

TABLE NO. 16.—INFECTIOUS DISEASES CASE AND DEATH RATES PER 100,000 POPULATION DURING THE YEARS 1939—1948

Diseases	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Plague ... { C } ... { D }	1.02 .357	2.9 1.4	.082 .035	.087 .058	.093 .637	3.7 2.2	1.2 .603	1.2 .314	.078 .026	— —
Typhus ... { C } ... { D }	26.0 4.8	26.3 5.1	55.3 10.3	128.0 25.6	230.6 47.4	104.8 22.9	102.0 20.2	8.5 1.9	.904 .277	1.7 .363
Small-Pox ... { C } ... { D }	— —	.012 —	— —	— —	23.8 2.2	63.5 5.8	7.6 .642	2.2 .276	.887 .094	.082 .020
Typhoid fever ... { C } ... { D }	28.4 6.8	28.9 5.6	33.8 6.9	39.6 7.3	25.4 4.5	28.5 4.5	29.5 4.6	25.2 3.5	24.0 3.6	28.2 4.1
Scarlet fever ... { C } ... { D }	.491 .03	.626 .018	.534 —	.256 .012	.310 .017	.17 —	.067 .006	.06 —	.052 .01	.046 —
Cerebro Spinal Meningitis { C } ... { D }	1.5 .83	1.1 .572	.934 .552	1.2 .586	.654 .327	.834 .426	.363 .273	.48 .243	.491 .167	.680 .189
Diphtheria ... { C } ... { D }	11.9 5.5	14.5 7.0	23.8 11.3	22.9 10.9	23.8 1.2	18.9 7.2	17.5 6.5	11.2 4.5	9.5 3.1	9.4 3.4
Measles ... { C } ... { D }	64.1 16.9	89.3 21.3	57.4 16.9	56.7 21.2	24.4 5.9	41.3 14.0	30.4 7.9	38.4 9.5	36.0 7.0	33.2 12.3
Pulmonary Tuberculosis... { C } ... { D }	38.3 16.1	37.2 16.6	36.9 17.8	18.4 20.2	32.9 20.9	39.4 21.6	38.1 20.5	35.3 20.2	34.0 18.7	33.8 19.0
Acute Pneumonia ... { C } ... { D }	— —	21.1 21.4	31.8 28.4	36.0 30.7	39.8 33.1	39.3 29.7	12.4 27.0	29.9 24.4	30.2 20.6	25.9 18.2
Chicken Pox ... { C } ... { D }	11.0 .133	8.0 .089	10.9 .088	5.1 .046	7.1 .12	6.0 .085	7.5 .067	4.8 .061	9.2 .037	8.8 .005
Puerperal Septicaemia ... { C } ... { D }	2.8 1.9	2.9 2.0	2.7 2.0	1.9 1.2	2.2 1.1	20.3 .896	2.2 .993	1.5 .799	1.6 .725	15.1 .481

Dysentery ... .. { C D	14.5 2.3	13.2 2.3	20.2 3.0	20.6 3.3	10.7 3.5	9.5 3.0	6.8 2.1	6.2 1.8	7.1 1.3	6.4 1.2
Influenza ... .. { C D	49.8 1.1	54.2 1.1	65.3 1.1	75.3 1.3	80.7 1.3	63.6 1.2	81.7 .348	96.8 .369	29.8 .214	26.3 .194
Malaria New ... .. { C D	— 88.0	— 80.2	— 54.7	— 121.5	— 94.9	214.7 19.6	32.9 .312	51.1 .121	35.2 .172	22.7 .118
Malaria Recurrent ... .. { C D	.376 —	.405 —	.611 —	2.3 —	7.7 —	1238.2 .079	789.8 .106	31.3 .022	17.6 .005	7.6 —
Anthrax ... .. { C D	.097 .376	.131 .03	.129 .03	.122 .023	.086 .052	.074 .011	.022 .011	.03 .006	.047 .005	.010 —
Whooping cough ... .. { C D	8.9 .024	19.3 1.0	17.2 1.02	13.1 .824	11.8 .603	6.9 .596	10.4 .513	5.0 .298	11.4 .329	3.9 .138
Parotitis ... .. { C D	11.9 .17	10.2 .16	10.3 .112	8.4 .174	8.3 .178	6.03 .17	9.7 .151	7.1 .072	9.8 .047	7.1 0.41
Undulant fever ... .. { C D	.23 .018	.161 .012	.117 —	.052 .012	.034 0.23	.113 .017	.084 .011	.12 .011	.06 .005	.143 .031
Leprosy ... .. { C D	4.0 .376	3.3 .411	3.0 .464	3.0 .476	2.3 .39	1.3 .329	1.9 .296	.68 .303	.845 .266	.762 .311
Tetanus ... .. { C D	2.9 1.8	2.8 1.8	2.5 1.8	2.7 1.8	2.5 1.7	3.1 1.9	2.5 1.7	2.4 2.5	2.3 1.6	2.1 1.61
Acute poliomyelitis ... .. { C D	.024 .018	.095 .036	.094 .053	.029 .006	.040 .011	.062 .027	.039 .033	.01 .033	.058 .73	.031 .141
Erysipelas ... .. { C D	26.9 3.2	28.8 2.8	26.4 2.7	18.5 1.8	11.2 1.2	9.5 .885	8.7 .815	6.5 .485	7.6 .474	7.2 .383
Relapsing fever ... .. { C D	— —	— —	— —	— —	— —	.057 —	95.6 4.9	6.08 13.3	1.2 .165	.031 —



TABLE No. 17.— CASES OF INFECTIOUS DISEASES NOTIFIED DURING 1947 AND 1948

Localities	Plague		Typhus		Small-Pox		Relapsing F.		Typhoid. F.		Scarlet F.		Cerebro-spinal F.		Diphtheria		Measles		Pulmonary T. B.		Acute Pneum.		Chicken Pox.		Puerperal Septicaemia	
	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ...	—	—	49	31	10	1	14	—	2,050	2,578	2	4	72	48	980	950	996	1,988	3,232	3,508	2,226	2,097	869	641	120	114
Alexandria	15	—	15	9	1	—	2	—	669	1,111	6	4	12	8	306	223	2,389	694	1,296	1,000	2,443	1,936	403	516	105	91
Ismailia	—	—	—	—	—	4	—	—	25	30	—	—	—	—	2	8	2	19	8	3	6	—	2	1	—	—
Port-Saïd	—	—	18	7	—	1	1	—	588	537	—	1	2	51	36	49	32	144	204	245	175	212	65	57	2	—
Damietta	—	—	1	—	—	—	—	—	30	34	—	—	—	—	1	3	1	7	16	5	28	19	2	27	1	—
Suez ...	—	—	1	1	—	3	—	—	76	98	—	—	1	—	15	33	8	69	72	67	64	111	8	19	1	—
Frontier Dist.	—	—	2	1	2	1	48	—	37	57	—	—	—	7	2	—	450	203	12	15	35	35	12	40	—	4
Behera	—	—	18	149	5	—	51	6	122	171	—	—	—	1	42	31	343	97	151	119	60	53	28	45	9	2
Dakahlia	—	—	15	39	14	—	46	—	99	110	1	—	1	6	43	43	252	634	202	215	84	49	21	48	3	5
Gharbia	—	—	12	46	113	—	32	—	158	121	—	—	3	2	55	77	455	79	331	291	102	59	38	70	9	5
Menoufia	—	—	2	4	1	—	3	—	65	56	1	—	—	—	39	56	394	390	106	104	25	28	31	47	1	8
Kaliubia	—	—	14	11	3	1	3	—	61	76	—	—	2	—	50	63	124	487	116	136	52	42	37	33	1	5
Sharkia	—	—	14	11	4	1	1	—	87	54	—	—	1	7	31	54	86	280	105	166	36	32	87	52	5	5
Aswan	—	—	—	—	—	—	—	—	10	2	—	—	—	—	21	14	81	3	65	34	15	7	4	32	2	1
Assiut ...	—	—	1	4	—	1	—	—	233	89	—	—	—	—	33	45	112	286	115	112	207	77	14	9	11	19
Beni-suef	—	—	—	1	—	—	—	—	26	21	—	—	—	1	8	11	3	3	41	72	6	5	23	8	3	4
Fayoum	—	—	—	—	—	—	—	—	7	36	—	—	—	—	3	7	93	158	137	158	43	89	13	3	9	5
Gerga ...	—	—	1	1	—	—	21	—	41	50	—	—	—	—	13	18	120	25	40	58	38	40	21	1	1	4
Giza ...	—	—	5	7	—	2	6	—	124	217	—	—	—	—	85	105	400	470	144	90	97	119	65	40	11	11
Minia ...	—	—	2	2	—	1	1	—	56	35	—	—	—	1	32	16	354	298	91	132	34	31	3	18	14	6
Qena ...	—	—	3	1	17	—	—	—	37	30	—	—	—	1	12	29	191	145	39	82	21	33	9	15	2	4
TOTAL ...	15	—	173	325	170	16	229	6,460	5,513	10	9	94	133	1,809	1,83	6,886	6,485	6,523	6,614	5,797	5,074	1,755	1,722	310	296	

TABLE No. 17.—CASES OF INFECTIOUS DISEASES 1947—1948 (Contd.)

Localities	Dysentery		Influenza		Malaria New		Malaria Rec.		Anthrax		Whooping Cough		Parotitis		Undulant fever		Leprosy		Tetanus		Acute polio		Erysipelas		TOTAL	
	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ...	215	169	1,421	1,348	434	546	120	17	—	—	314	102	725	297	11	18	4	5	85	73	—	—	309	308	14,258	14,843
Alexandria...	322	396	1,300	1,671	209	241	—	—	1	—	138	86	235	598	1	—	6	4	59	44	7	3	549	583	10,489	9,218
Ismailia ...	2	1	88	28	13	48	—	2	—	—	—	—	3	1	—	—	—	—	3	6	—	—	—	6	154	157
Port-said ...	36	37	616	452	97	106	—	—	—	—	9	—	29	12	—	—	1	2	16	9	1	—	66	69	1,994	1,991
Damietta ...	3	7	49	36	21	59	—	—	—	—	21	—	12	2	—	—	—	—	2	2	—	—	9	3	197	197
Suez ...	49	54	179	180	52	87	27	33	—	—	8	5	19	18	—	—	—	—	2	2	—	—	10	4	592	791
Frontier Dist.	124	62	85	95	260	230	—	—	1	—	128	45	162	6	—	—	—	—	—	0	—	—	—	2	1,360	802
Behera...	10	3	155	124	2,659	679	—	1	—	—	74	9	327	17	—	—	4	4	34	45	—	—	—	38	4,145	1,594
Dakahlia ...	10	5	144	94	126	209	1	7	—	1	188	82	23	9	—	—	21	25	25	22	—	—	53	75	1,389	1,768
Gbarbia ...	80	13	319	144	970	224	489	1	2	1	40	50	80	56	1	—	8	8	39	38	1	3	136	106	3,473	1,395
Menoufia ...	36	17	123	95	73	45	3	6	—	—	77	57	11	14	—	—	26	17	31	26	—	—	66	78	1,114	1,039
Kaliubia ...	23	7	236	173	714	1,068	13	4	1	—	32	18	43	9	—	—	4	12	7	18	—	—	34	32	1,570	2,195
Sharkia ...	19	57	105	53	473	478	3	—	1	—	25	6	11	112	—	—	10	19	19	28	1	—	41	29	1,165	1,444
Aswan ...	89	17	36	23	96	29	—	3	—	—	548	1	6	82	—	—	1	1	5	5	—	—	2	1	981	255
Assiut ...	74	79	366	126	5	10	1	—	—	—	88	14	31	2	—	—	11	7	29	—	—	—	33	19	1354	928
Beni-Suef ...	6	5	37	51	10	26	—	1	—	—	2	3	72	2	—	—	3	3	8	5	—	—	5	5	253	227
Fayoum ...	3	18	14	31	361	120	2,708	1,398	2	—	5	96	10	3	—	—	19	2	14	9	—	—	11	7	3,436	2,142
Gerga ...	5	9	46	45	20	2	—	—	—	—	36	40	4	3	—	—	3	16	5	9	—	—	11	6	442	327
Giza ...	41	20	142	196	100	105	—	—	1	—	216	60	30	34	1	5	1	10	21	15	1	—	34	15	1,525	1,531
Minia ...	140	102	94	94	49	126	—	—	—	—	66	10	56	99	—	1	23	7	35	27	0	—	15	19	1,065	1,025
Qena ...	72	175	156	77	5	7	—	20	—	—	174	86	1	13	—	—	17	7	4	2	0	—	6	8	766	743
TOTAL ...	1,359	1,249	5,711	5,136	6,747	4,445	3,365	1,493	9	22,189	770	1,880	1,389	28	14	443	162	149	414	11	6	1,460	1,413	51,722	44,522	



TABLE No. 18. INFECTIOUS DISEASES

Localities	Plague		Typhus		Small-Pox		Relapsing		Typhoid		Scarlet	
	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ... ..	—	—	2·3	1·5	·476	·047	·667	—	97·6	120·9	·095	·184
Alexandria ... ..	1·9	—	1·6	·945	·108	—	·215	—	72·1	116·6	·646	·420
Ismailia ... ..	—	—	—	—	—	3·6	—	—	36·6	26·8	—	0
Port-Saïd ... ..	—	—	10·1	3·8	—	·543	·560	—	329·6	291·5	—	·543
Damietta ... ..	—	—	1·9	—	—	—	—	—	55·9	61·1	—	—
Suez... ..	—	—	·9	·891	—	2·7	—	—	70·2	37·3	—	—
Froncier Dist. ...	—	—	1·2	·578	1·2	·578	28·7	—	22·1	32·9	—	—
Behera ... ..	—	—	1·4	·116	·402	—	4·1	·469	9·8	13·4	—	—
Dakahlia ... ..	—	—	1·1	2·7	·989	—	3·2	—	7·0	7·6	·071	—
Gharbia ... ..	—	—	·5	1·9	4·8	—	1·4	—	6·8	5·0	—	—
Menoufia... ..	—	—	·17	·334	·086	—	·257	—	5·6	4·7	·086	—
Kaliubia ... ..	—	—	2·0	1·5	·437	·140	·437	—	3·9	10·7	—	—
Sharkia ... ..	—	—	1·0	·817	·295	·074	·074	—	6·4	4·0	—	—
Aswan ... ..	—	—	—	—	—	—	—	—	3·5	·672	—	—
Assiut ... ..	—	—	·1	·284	—	·071	—	—	16·9	6·3	—	—
Beni-Suef ... ..	—	—	—	·159	—	—	—	—	4·2	3·3	—	—
Fayoum ... ..	—	—	—	—	—	—	—	—	1·0	5·2	—	—
Gerga ... ..	—	—	·1	·075	—	—	1·6	—	3·2	3·8	—	—
Giza ... ..	—	—	·6	1·0	—	·227	·730	—	15·1	24·7	—	—
Minia ... ..	—	—	·2	·186	—	·093	·094	—	5·3	3·3	—	—
Qena ... ..	—	—	·3	·088	1·5	—	—	—	3·3	2·6	—	—
TOTAL ... ..	·078	—	·904	1·7	·887	·082	1·2	·031	24·0	28·2	·052	046



CASE-RATES PER 100,000 POPULATION 1947—1948

Cerebro Spinal Fev,		Diphtheria		Measles		Pulmonary T. B.		Acute Pneumonia		Chicken Pox		Puerpera Sep.	
47	48	47	48	47	48	47	48	47	48	47	48	47	
3.4	2.2	46.7	44.5	47.9	93.2	153.9	161.0	106.0	96.5	41.4	29.4	5.7	7.8
1.3	.84	32.9	23.4	257.4	72.8	139.6	105.0	263.2	203.3	43.4	54.1	11.3	9.5
—	—	1.8	7.1	2.9	17.0	11.7	2.7	—	—	—	.894	—	—
1.1	27.7	20.2	26.6	17.9	78.1	114.3	133.0	97.6	115.1	16.4	30.9	1.1	—
—	—	1.8	5.4	1.9	12.6	29.8	9.0	52.2	34.1	3.7	48.5	1.9	—
.924	—	13.9	29.4	7.4	61.5	67.1	59.7	29.1	98.9	7.4	16.9	.924	3.7
—	4.0	1.2	—	268.6	116.2	7.2	8.7	20.9	20.2	7.2	23.1	—	1.7
—	.078	3.4	2.4	27.6	7.6	12.2	9.3	4.8	4.1	2.3	3.5	.724	.156
.071	.412	7.0	3.0	17.8	43.6	14.3	14.8	5.9	3.4	1.5	3.3	.212	.344
.129	.083	2.4	3.2	19.5	3.35	14.2	12.1	4.4	2.5	1.6	2.9	.386	.208
—	—	3.3	4.7	33.7	32.5	9.1	8.7	5.1	2.3	2.7	3.9	.086	.667
.291	—	7.3	8.8	18.0	68.3	16.9	19.1	7.6	5.9	5.4	4.6	.146	.701
.076	.520	2.3	4.0	6.3	20.8	7.7	12.3	2.7	23.8	6.4	3.9	.369	.372
—	—	7.3	4.7	27.7	1.0	22.3	11.4	5.2	2.4	1.4	10.8	.691	.336
—	—	2.4	3.2	8.1	20.3	8.3	8.0	15.0	5.5	1.0	.639	.797	1.3
—	.159	1.3	1.7	.489	.477	6.7	11.5	97.8	.7	953.7	1.3	.489	.636
—	—	.447	1.2	13.8	22.9	20.4	22.5	6.4	12.9	1.9	.435	1.3	.725
—	—	1.0	1.4	9.3	1.9	3.1	4.4	2.9	3.0	1.6	.075	.1	.302
—	—	10.3	11.9	48.7	53.4	17.5	10.2	11.8	13.5	7.9	4.5	1.3	1.3
—	.093	3.0	1.5	33.4	27.7	8.6	12.3	3.2	2.9	.028	1.7	1.3	.558
—	.088	1.1	2.6	17.3	13.5	3.5	7.2	1.9	2.9	.810	1.7	.181	.353
.491	.680	9.5	9.4	36.0	33.2	34.0	33.8	30.2	25.9	9.2	8.8	1.6	15.1

TABLE No. 18.—INFECTIOUS DISEASES CASE-

Localities	Dysentery		Influenza		Malaria New		Malaria Recurrent		Anthrax		Whooping cough	
	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ... ..	10·2	7·8	67·7	61·9	20·7	25·1	5·7	·78	—	—	14·9	4·8
Alexandria	34·7	41·5	140·1	175·3	22·5	25·3	—	—	·108	—	14·9	9·0
Ismailia ...	·293	·894	128·8	25·0	19·0	42·9	—	1·8	—	—	—	—
Port-Said ...	20·2	20·1	345·2	245·4	54·4	57·5	—	—	—	—	5·0	—
Damietta ...	5·6	0	91·4	64·6	39·2	105·9	—	—	—	—	39·2	—
Suez ... ..	45·3	50·8	165·4	160·4	48·0	77·5	24·9	29·4	—	—	7·4	4·5
Frontier Dist.	74·0	35·8	50·7	54·9	155·2	13·3	—	—	·597	—	76·4	26·0
Behera... ..	·805	·234	12·5	9·7	214·0	53·1	—	·078	—	—	6·0	·703
Dakahlia ...	·706	·244	10·2	6·5	8·9	14·4	·071	·482	—	·069	13·3	5·6
Gharbia ...	3·4	·542	13·7	6·0	41·6	9·3	20·9	·042	·086	·042	1·7	2·1
Menoufia ...	3·1	1·4	10·5	7·9	6·2	3·8	·257	·5	—	—	6·6	4·8
Kaliubia ...	3·3	·981	34·3	24·2	103·9	149·7	1·9	·561	·146	—	4·7	2·5
Sharkia ...	1·4	4·2	7·7	3·9	34·9	35·5	·221	—	·074	—	1·8	·446
Aswan ... ..	31·1	5·7	12·6	7·7	32·9	9·7	—	1·0	—	—	191·7	·336
Assiut ... ..	5·4	5·6	26·5	8·9	·362	·71	·072	—	—	—	6·4	·099
Beni-Suef ...	·978	·795	6·0	8·1	1·6	4·1	—	·159	—	—	·326	·477
Fayoum ... ..	·447	2·6	2·1	4·5	53·7	17·4	403·0	202·8	·297	—	·744	13·9
Gerga ... ..	·388	·678	3·6	3·4	1·6	·151	—	—	—	—	·28	3·0
Giza ... ..	5·0	2·3	17·3	22·3	12·2	11·9	—	—	·122	—	26·3	6·8
Minia ... ..	13·2	9·5	8·9	8·7	4·7	11·7	—	—	—	—	6·0	·93
Qena ... ..	6·5	15·4	14·0	6·8	·452	·618	—	—	—	—	15·7	7·6
TOTAL ... ..	7·1	6·4	29·8	26·3	35·2	22·7	17·6	7·6	·047	·010	11·4	3·9



RATES PER 100,000 POPULATION 1947-1948. (contd.)

Parotitis		Undulant F.		Leprosy		Tetanus		Acute poliomyelitis		Erysipelas		TOTAL	
	48	47	48	47	48	47	48	47	48	47	48	47	48
5	13.6	.524	.826	.190	.227	40	3.3	—	—	14.7	14.1	—	—
3	62.7	.108	—	.646	.420	6.4	4.6	.754	.315	59.1	61.2	—	—
4	.894	—	—	—	—	4.4	5.4	—	—	—	5.4	—	—
3	6.5	—	—	.560	1.1	9.0	4.9	.560	—	37.0	37.5	—	—
4	3.6	—	—	—	—	3.7	3.6	—	—	5.4	16.8	—	—
6	16.0	—	—	—	—	1.8	1.8	—	—	3.6	9.2	—	—
7	3.4	—	—	—	—	—	—	—	—	1.2	—	—	—
3	1.3	—	—	.322	.313	2.7	3.5	—	—	3.0	4.3	—	—
6	.618	—	—	1.5	1.7	1.8	1.5	—	—	5.2	4.9	—	—
4	2.3	.043	.069	.343	.333	1.7	1.6	.043	.125	4.4	5.8	—	—
941	2.1	—	.042	2.2	1.4	2.7	2.2	—	—	5.7	5.6	—	—
3	1.3	—	—	.583	1.7	1.0	2.5	—	—	4.5	4.9	—	—
811	8.3	—	—	.737	1.43	1.4	2.1	.074	—	2.2	3.0	—	—
1	27.6	—	—	.350	.336	1.7	1.7	—	—	.336	.699	—	—
5	.142	—	—	.797	.497	2.0	2.1	—	—	1.3	2.4	—	—
7	.318	—	—	.289	.318	1.3	.795	—	—	.795	.815	—	—
5	.435	—	.29	.447	.291	2.1	1.3	—	—	1.0	1.6	—	—
210	.226	—	—	1.5	1.2	.388	.679	—	—	.453	.854	—	—
365	3.9	.122	.569	.122	1.1	2.6	1.7	.117	—	2.8	4.0	—	—
3	9.2	—	.093	2.2	.651	3.3	2.5	—	—	1.8	1.4	—	—
090	1.9	—	—	1.5	.618	.362	.177	—	—	.706	.542	—	—
8	7.1	.06	.143	.845	.762	2.3	2.1	.058	.031	7.6	7.2	270.4	227.7

TABLE No. 19.—INFECTIOUS DISEASES DEATHS 1947—1948

Localities	Plague		Typhus		Small-Pox		Relapsing		Typhoid		Scarlet Fev.		C.S.F.		Diphtheria		Measles		Pulmonary T.B.		Acute Pneu.		Chicken p.		Puerperal Sept.	
	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ...			11	1	2		10		214	310			13	7	170	188	522	1,250	1,490	1,480	1,528	1,734	3		38	31
Alexandria ...	5		7	3			1		106	155			3	7	70	50	187	47	725	627	1,547	859	2		14	9
Ismailia ...									17	6					7		2	39	32	42	93	83				3
Port-Saïd ...									38	34				9	12	10	8	187	95	129	66			4	2	
Damietta ...						1			9	14					5	4		0	22	20	4	4				
Suez ...									12	13			1		10	21		2	26	21	22	25		1		
Frontier Dist.							2		1	4				2	1		54	85	9	2	3	4				
Behera ...			12	35			2		26	26					26	22	99	23	114	140	34	25	1		2	4
Dakahlia ...			3	9	1		2		22	20			1	4	27	32	41	145	129	173	36	41			3	2
Gharbia ...			3	7	11		1		34	32			3	3	43	51	67	34	184	197	149	99			8	3
Menoufia ...			2	1					28	19				1	38	55	29	31	54	77	35	48			3	5
Kaliubia ...			7	5	1				10	17			2		31	33	9	57	68	70	38	60		1	2	2
Sharkia ...			4	5					22	11			3	3	22	27	27	27	97	96	63	82			1	3
Aswan ...									6	3					16	16	5	1	48	38	11	34			2	6
Assiut ...						1	1		44	21					22	27	172	95	80	72	83	34			3	4
Beni Suef ...			1	2					8	8					9	11	2	12	26	37	37	88			4	3
Fayoum ...									1	7					3	7	14	21	53	80	22	24			2	5
Gerga ...							3		16	6					12	18	31	8	29	36	26	33			7	5
Giza ...			2	3			6		48	83			1	1	44	51	46	142	148	209	95	121	1		5	2
Minia ...						1			11	12					14	13	66	42	79	87	34	26			3	1
Qena ...			1			1	1		18	13					9	23	55	87	73	80	32	71				
TOTAL ...	5	0	53	71	18	4	30		685	814	2	0	32	37	591	659	1,336	2,408	3,581	3,718	3,948	3,561	7	1	101	94



TABLE No. 19.—INFECTIOUS DISEASES DEATHS 1947—1948 (Contd.)

Localities	Dysentery		Influenza		Malaria New		Malaria Recurrent		Whooping Cough		Parotitis		Undulant Fev.		Leprosy		Tetanus		Acute Polio.		Erysipelas		Total	
	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ...	110	103	2	2	7	4	—	—	16	8	1	2	—	1	8	8	37	32	7	1	20	20	4,209	5,182
Alexandria ...	47	51	2	1	5	1	—	—	1	—	1	1	1	—	—	—	06	24	—	2	13	7	2,783	1,848
Ismailia ...	3	4	1	0	—	—	—	—	—	—	—	—	—	—	—	—	5	3	1	1	—	1	161	183
Port-Saïd ...	6	5	1	1	—	—	—	—	3	—	—	—	—	—	—	—	9	3	—	—	1	4	233	450
Damietta ...	—	—	—	1	—	1	—	—	—	1	—	—	—	—	—	—	3	2	—	—	—	—	43	47
Suez... ..	—	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	1	75	88
Frontier Dist....	—	0	8	2	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1	82	76
Behera ...	8	7	2	4	2	—	—	—	4	3	—	—	—	—	4	3	26	32	—	0	3	5	361	327
Dakahlia...	2	5	1	0	—	—	—	—	4	4	1	—	—	—	4	4	23	14	—	—	8	6	307	459
Gharbia ...	6	7	2	3	3	3	—	—	3	3	1	—	—	—	5	3	34	40	1	—	11	3	569	489
Menoufia...	5	4	1	1	—	1	—	—	3	1	—	—	—	—	1	8	32	26	—	—	6	4	237	283
Kaliubia ...	6	6	2	3	1	—	—	—	3	—	—	—	—	—	2	3	10	14	—	—	5	6	197	278
Sharkia ...	10	6	—	1	6	4	—	—	2	2	—	—	—	—	—	1	24	24	—	—	3	2	275	394
Aswan ...	3	1	—	0	—	2	—	—	1	1	—	—	—	—	2	1	3	3	—	—	1	—	99	102
Assiut ...	8	15	5	3	—	—	—	—	7	2	—	—	—	—	8	12	17	19	—	—	5	7	355	314
Beni Suef ...	3	1	3	1	1	1	—	—	—	1	—	—	1	—	1	1	4	9	—	—	1	0	99	175
Fayoum ...	1	2	—	0	1	1	—	—	—	—	1	—	—	—	—	—	8	12	—	—	—	3	107	162
Gerga ...	7	1	3	1	1	1	—	—	1	5	—	—	—	—	—	—	9	4	—	—	5	1	150	119
Giza ...	8	4	4	4	2	—	—	—	8	4	—	—	2	—	1	4	16	22	5	—	7	1	450	652
Minia ...	2	2	3	3	—	—	—	—	6	3	—	—	2	—	5	3	15	21	—	—	—	2	240	216
Qena ...	2	3	8	6	—	3	—	—	—	3	—	2	—	—	5	3	5	4	—	—	1	1	215	306
TOTAL ...	245	228	42	38	31	23	1	—	63	27	9	8	1	6	51	61	309	309	14	8	91	75	11,247	12,150

TABLE No. 20.—INFECTIOUS DISEASES

Localities	Plague		Typhus		Small-Pox		Relapsing		Typhoid		Scarlet	
	47	48	47	48	47	48	47	48	47	48	47	48
Cairo ... ..	—	—	·524	·047	·095	—	·476	—	10·3	14·5	—	—
Alexandria ... ..	·539	—	·754	·315	—	—	·108	—	1·1	16·5	—	—
Ismailia ... ..	—	—	—	—	—	—	·0	—	15·5	·536	—	—
Port-Saïd ... ..	—	—	—	—	—	—	0	—	21·3	18·5	—	—
Damietta ... ..	—	—	—	—	—	—	0	—	16·8	25·3	—	—
Suez ... ..	—	—	—	—	—	·891	0	—	11·1	11·6	—	—
Frontier Dist ...	—	—	—	—	—	—	1·2	—	·597	2·3	—	—
Behera... ..	—	—	·966	2·7	—	—	·161	—	1·8	2·0	—	—
Dakahlia ... ..	—	—	·214	·618	·07	—	·141	—	1·5	1·4	—	—
Gharbia ... ..	—	—	·129	·292	·471	—	·043	—	1·4	1·3	—	—
Menoufia ... ..	—	—	·171	·083	—	—	0	—	2·4	1·6	—	—
Kaliubia ... ..	—	—	1·1	·701	·146	—	·146	—	1·4	2·4	—	—
Sharkia ... ..	—	—	·302	·371	—	—	0	—	1·6	·817	—	—
Aswan ... ..	—	—	—	—	—	—	0	—	2·1	1·0	—	—
Assiut ... ..	—	—	—	—	—	·071	·072	—	3·2	1·5	—	—
Beni-Suef ... ..	—	—	·163	·318	—	—	0	—	1·3	1·3	—	—
Fayoum ... ..	—	—	—	—	—	—	0	—	·149	1·0	—	—
Gerga ... ..	—	—	—	—	—	—	·31	—	1·2	·453	—	—
Giza ... ..	—	—	·243	·341	—	—	·73	—	5·8	9·4	·243	—
Minia ... ..	—	—	—	—	—	·093	0	—	1·0	1·1	—	—
Qena ... ..	—	—	·09	—	·271	·088	·09	—	1·6	1·1	·09	—
TOTAL ...	·026	—	·277	·363	·094	·020	·156	—	3·6	4·1	·01	—

RATES PER 100,000 POPULATION 1947—1948

M.	Diphtheria		Measles		Pulmonary T. B.		Acute pneu		Chicken pox		Puerperal Sept	
	47	48	47	48	47	48	47	48	47	48	47	48
·328	8·2	8·8	25·1	58·6	71·6	69·4	72·9	81·2	·143	—	1·9	1·5
·734	7·5	5·2	20·1	4·9	78·3	35·8	166·7	90·1	·216	—	1·5	·944
—	10·2	—	2·9	3·5	46·8	3·8	136·1	7·4	—	—	—	·268
4·8	6·7	5·0	4·5	101·5	53·2	70·0	30·8	35·8	—	—	2·3	1·1
—	9·3	·718	—	—	41·0	3·6	7·5	·718	—	—	—	—
—	9·2	18·7	—	1·8	24·0	18·7	20·3	22·3	—	—	·924	—
1·2	·597	—	32·2	33·5	5·4	1·2	1·8	2·3	—	—	—	—
—	2·1	1·7	7·9	1·8	9·2	10·9	2·8	2·0	·08	—	·161	·313
·275	1·9	2·2	2·9	10·0	9·1	11·9	2·5	2·8	—	—	·141	·137
·125	1·8	2·1	2·9	1·4	7·8	8·2	6·3	4·1	—	—	·343	·125
—	3·3	·083	2·5	4·6	4·6	2·6	2·9	6·4	—	—	·257	·417
—	4·5	4·6	1·2	8·0	9·8	9·8	5·7	8·4	—	·140	—	·280
·223	1·5	2·0	2·0	9·4	7·1	7·1	4·8	6·1	—	—	·074	·223
—	5·6	5·4	1·7	·336	16·5	·12·8	3·8	11·4	—	—	·699	·716
—	1·6	1·9	5·2	6·7	5·8	5·1	6·	2·4	—	—	·217	·426
—	1·5	1·7	·326	1·9	4·2	5·9	6·	14·0	—	—	·489	·636
—	·447	1·0	2·1	3·0	7·9	1·2	3·3	3·5	—	—	·595	·435
—	·925	1·4	2·4	·603	2·4	3·7	2·0	2·5	—	—	·155	·377
·114	5·4	5·8	5·6	16·1	17·3	23·8	11·6	13·8	·243	—	·852	·568
—	1·3	1·2	6·2	3·9	7·4	8·1	7·2	2·4	—	—	·471	·186
—	·814	2·0	5·0	7·7	6·6	7·5	2·9	6·3	—	—	·09	·265
·169	3·1	3·4	7·0	12·3	81·7	19·0	20·6	18·2	·037	·005	·725	·481



TABLE No. 20.—INFECTIOUS

Localities	Dysentery		Influenza		Malaria-New		Malaria-Recurrent		Anthrax		Whoopi
	47	48	47	48	47	48	47	48	47	48	47
Cairo ... ..	5·2	4·8	·095	0·094	·333	·188	—	—	—	—	·762
Alexandria ...	5·1	5·3	·216	·105	·539	·105	—	—	—	—	·108
Ismailia ... ..	4·4	·357	1·5	—	—	—	—	—	—	—	—
Port-Saïd ... ..	3·4	2·7	·56	543	—	—	—	—	—	—	1·7
Damietta ... ..	—	—	—	1·8	—	1·8	—	—	—	—	—
Suez ... ..	—	·891	·924	·891	·924	—	—	—	—	—	—
Frontier Dist. ...	—	—	4·8	1·2	·597	—	—	—	·597	—	·597
Behera... ..	·644	·546	·161	·313	·161	—	—	—	—	—	·322
Dakahlia ... ..	·141	·344	·070	—	—	—	—	—	—	—	·282
Gharbia ... ..	·255	·292	·085	·125	·129	·125	—	—	—	—	·129
Menoufia ... ..	·428	·344	·086	·083	—	—	—	—	—	—	·257
Kaliubia ... ..	·873	·814	·291	·421	·291	·140	—	—	—	—	·437
Sharkia ... ..	·756	·420	—	·074	·453	·297	—	—	—	—	·147
Aswan ... ..	1·0	·336	—	—	—	·672	·350	—	—	—	3·5
Assiut ... ..	·580	1·1	·362	·213	—	—	—	—	—	—	·507
Beni-Suef ... ..	·489	·159	·489	·159	·163	·159	—	—	—	—	—
Fayoum ... ..	·149	·290	—	—	·149	·145	—	—	—	—	—
Gerga ... ..	·543	·075	·31	·075	·078	·075	—	—	—	—	·078
Giza ... ..	·974	·455	·487	·455	·043	—	—	—	—	—	·974
Minia ... ..	·188	·186	·283	·279	—	—	—	—	—	—	·565
Qena ... ..	·181	·265	·723	·530	—	·265	—	—	—	—	—
TOTAL ...	1·3	1·2	·214	·194	·172	·118	·005	—	·005	—	·329

RATES PER 100,000 POPULATION 1947-1948. (contd.)

Disease	Undulant F.		Leprosy		Tetanus		Acute Poliom		Erysipelas		TOTAL	
	47	48	47	48	47	48	47	48	47	48	47	48
·094	—	·047	·381	·376	1·8	6·2	·333	·047	·952	·094	—	—
·105	·108	—	—	—	3·9	2·5	—	·21	1·4	·734	—	—
·894	—	—	—	—	7·3	2·7	1·5	·894	—	·894	—	—
—	—	—	—	—	5·0	1·6	—	—	·560	2·2	—	—
—	—	—	—	—	5·6	1·8	—	3·6	—	—	—	—
—	—	—	—	—	·924	·891	—	·891	—	·891	—	—
—	—	—	—	—	—	—	—	—	·597	·578	—	—
—	—	—	·322	·234	2·1	2·5	—	—	·241	·391	—	—
—	—	—	·282	·275	1·6	·962	—	—	·494	·412	—	—
·041	—	—	·214	·125	1·5	1·7	·043	·125	·471	·125	—	—
—	—	·083	·086	·667	2·8	2·2	—	—	·428	·334	—	—
—	—	—	·291	·421	1·5	2·0	—	—	·728	·842	—	—
—	—	—	—	·421	1·3	1·8	—	—	·221	·148	—	—
—	—	—	·699	·336	1·0	1·0	—	—	·350	—	—	—
—	—	—	·580	·852	1·2	1·3	—	—	·362	·497	—	—
—	—	—	·163	·159	·652	1·4	—	—	·163	—	—	—
·145	—	—	—	·145	1·2	1·7	—	—	—	·435	0	—
—	—	—	·388	·377	·699	·302	—	—	·388	·075	—	—
—	—	·227	·243	·455	1·9	2·5	·609	—	·852	·114	—	—
—	—	·186	·471	·279	1·4	2·0	—	—	—	·186	—	—
·177	—	—	·452	265	·452	·353	—	—	·09	·088	—	—
·041	·005	·031	·266	·311	1·6	1·6	·73	·141	·47	·383	58·8	62·1

# Relapsing Fever

TABLE No. 21.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 POPULATION 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Popul.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	—	—	—	—	—	—	—	—	—	—	—
Alexandria ... ..	—	—	—	—	—	—	—	—	—	—	—
Ismailia ... ..	—	—	—	—	—	—	—	—	—	—	—
Port-Saïd ... ..	—	—	—	—	—	—	—	—	—	—	—
Suez... ..	—	—	—	—	—	—	—	—	—	—	—
Damietta ... ..	—	—	—	—	—	—	—	—	—	—	—
TOTAL Governorates	—	—	—	—	—	—	—	—	—	—	—
Frontier Districts	—	—	—	—	—	—	—	—	—	—	—
Bchera ... ..	1	—	5	—	—	—	—	—	—	—	0·5
Dakahlia ... ..	—	—	—	—	—	—	—	—	—	—	—
Gharbia ... ..	—	—	—	—	—	—	—	—	—	—	—
Menoufia... ..	—	—	—	—	—	—	—	—	—	—	—
Kaliubia ... ..	—	—	—	—	—	—	—	—	—	—	—
Sharkia ... ..	—	—	—	—	—	—	—	—	—	—	—
TOTAL Lower Egypt	1	—	5	—	—	—	—	—	6	—	0·07
Aswan ... ..	—	—	—	—	—	—	—	—	—	—	—
Assiut ... ..	—	—	—	—	—	—	—	—	—	—	—
Beni-Suef ... ..	—	—	—	—	—	—	—	—	—	—	—
Fayoum ... ..	—	—	—	—	—	—	—	—	—	—	—
Gerga ... ..	—	—	—	—	—	—	—	—	—	—	—
Giza ... ..	—	—	—	—	—	—	—	—	—	—	—
Minia ... ..	—	—	—	—	—	—	—	—	—	—	—
Qena ... ..	—	—	—	—	—	—	—	—	—	—	—
TOTAL Upper Egypt	—	—	—	—	—	—	—	—	—	—	—
GRAND TOTAL ...	1	—	5	—	—	—	—	—	6	—	0·03



# Typhus

TABLE No. 22.—QUARTERLY DISTRIBUTION OF CASES AND DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	7	—	12	—	5	1	7	—	31	1	1.5
Alexandria ... ..	1	—	3	3	3	—	2	—	9	3	0.9
Ismailia ... ..	—	—	—	—	—	—	—	—	—	—	—
Port-Saïd ... ..	—	—	1	—	5	—	1	—	7	—	3.8
Suez... ..	1	—	—	—	—	—	—	—	1	—	0.9
Damietta ... ..	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL Governorates</b>	<b>9</b>	<b>—</b>	<b>16</b>	<b>3</b>	<b>13</b>	<b>1</b>	<b>10</b>	<b>—</b>	<b>48</b>	<b>4</b>	<b>1.4</b>
Frontier-Districts...	—	—	1	—	—	—	—	—	1	—	0.6
Behara ... ..	42	10	90	19	10	4	7	2	149	35	11.6
Dakahlia ... ..	15	5	22	3	1	—	1	1	39	9	2.7
Gharbia ... ..	2	1	41	5	3	1	—	—	46	7	1.9
Menoufia... ..	—	—	3	—	1	1	—	—	4	1	0.3
Kaliubia ... ..	1	—	6	3	3	—	1	1	11	5	1.5
Sharkia ... ..	1	—	10	5	—	—	—	—	11	5	0.8
<b>TOTAL Lower Egypt</b>	<b>61</b>	<b>17</b>	<b>172</b>	<b>35</b>	<b>18</b>	<b>6</b>	<b>9</b>	<b>4</b>	<b>261</b>	<b>62</b>	<b>3.1</b>
Aswan ... ..	—	—	—	—	—	—	—	—	—	—	—
Assiut ... ..	3	—	1	—	—	—	—	—	4	—	0.3
Beni-Suef ... ..	—	—	—	—	1	2	—	—	1	—	0.2
Fayoum ... ..	—	—	—	—	—	—	—	—	—	—	—
Gerga ... ..	1	—	5	3	1	—	2	—	9	3	1.0
Giza ... ..	—	—	—	—	—	—	1	—	1	—	0.08
Minia ... ..	—	—	2	—	—	—	—	—	2	—	0.02
Qena ... ..	—	—	—	—	1	—	—	—	1	—	0.09
<b>TOTAL Upper Egypt</b>	<b>4</b>	<b>—</b>	<b>8</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>—</b>	<b>18</b>	<b>5</b>	<b>2.0</b>
<b>Grand Total ...</b>	<b>74</b>	<b>17</b>	<b>197</b>	<b>41</b>	<b>34</b>	<b>9</b>	<b>22</b>	<b>4</b>	<b>327</b>	<b>71</b>	<b>1.7</b>

# Small Pox

TABLE No. 23.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Popula- tion
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	—	—	—	—	—	—	1	—	1	—	0,047
Alexandria ... ..	—	—	—	—	—	—	—	—	—	—	—
Ismailia ... ..	—	—	4	—	—	—	—	—	4	—	3·6
Port-Saïd ... ..	1	—	—	—	—	—	—	—	1	—	0·543
Suez ... ..	—	—	—	—	—	—	—	—	—	—	—
Damietta ... ..	—	—	—	—	—	—	3	1	3	1	2·7
<b>TOTAL Governorates</b>	<b>1</b>	<b>—</b>	<b>4</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>0·253</b>
Frontier Districts	—	—	—	—	—	—	1	—	1	—	0·891
Behera ... ..	—	—	—	—	—	—	—	—	—	—	—
Dakahlia ... ..	—	—	—	—	—	—	—	—	—	—	—
Gharbia ... ..	—	—	—	—	—	—	—	—	—	—	—
Menoufia... ..	—	—	—	—	—	—	—	—	—	—	—
Kaliubia ... ..	—	—	1	—	—	—	—	—	1	—	0·042
Sharkia ... ..	—	—	1	—	—	—	—	—	1	—	0·074
<b>TOTAL Lower Egypt</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>—</b>	<b>0·024</b>
Aswan ... ..	—	—	—	—	—	—	—	—	—	—	—
Assiut ... ..	—	—	1	—	—	1	—	—	1	1	0·071
Beni-Suef ... ..	—	—	—	—	—	—	—	—	—	—	—
Fayoum ... ..	—	—	—	—	—	—	—	—	—	—	—
Gerga ... ..	—	—	—	—	—	—	—	—	—	—	—
Giza ... ..	—	—	1	—	—	—	1	—	2	—	0·227
Minia ... ..	1	—	—	1	—	—	—	—	1	1	0·093
Qena ... ..	—	—	—	1	—	—	—	—	—	1	—
<b>TOTAL Upper Egypt</b>	<b>1</b>	<b>—</b>	<b>2</b>	<b>2</b>	<b>—</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>4</b>	<b>3</b>	<b>0·054</b>
<b>GRAND TOTAL ...</b>	<b>2</b>	<b>—</b>	<b>8</b>	<b>2</b>	<b>—</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>16</b>	<b>4</b>	<b>0·082</b>

# Typhoid Fever

TABLE No. 24.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Population
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	195	29	517	59	1263	143	603	79	2,578	310	120.9
Alexandria ... ..	77	8	176	22	591	86	267	39	1,111	155	116.5
Ismailia ... ..	2	2	2	—	16	1	10	3	30	6	26.8
Port-Saïd ... ..	45	5	131	6	239	15	122	8	537	34	291.5
Damietta ... ..	3	1	8	5	19	7	4	1	34	14	61.0
Suez... ..	4	—	22	5	40	5	32	3	98	13	87.3
<b>TOTAL Governorates</b>	<b>326</b>	<b>45</b>	<b>856</b>	<b>97</b>	<b>2,168</b>	<b>257</b>	<b>1,038</b>	<b>133</b>	<b>4,388</b>	<b>532</b>	<b>123.6</b>
Frontier Districts...	4	2	9	—	24	1	20	1	57	4	32.9
Behera ... ..	15	—	42	7	70	14	44	5	171	26	13.4
Dakahlia ... ..	14	1	26	7	43	9	27	3	110	20	7.6
Gharbia ... ..	13	2	36	11	43	13	29	6	121	32	5.0
Menoufia... ..	6	2	16	6	26	7	8	4	56	10	4.7
Kaliubia ... ..	6	1	16	4	36	6	18	6	76	17	10.7
Sharkia ... ..	5	2	8	1	30	6	11	2	54	11	4.0
<b>TOTAL Lower Egypt</b>	<b>59</b>	<b>8</b>	<b>144</b>	<b>36</b>	<b>248</b>	<b>55</b>	<b>137</b>	<b>26</b>	<b>588</b>	<b>125</b>	<b>7.0</b>
Aswan ... ..	1	2	—	—	1	1	—	—	2	3	0.7
Assiut ... ..	16	2	28	5	31	8	14	6	89	21	6.3
Beni-Suef ... ..	4	2	5	—	10	4	2	2	21	8	3.3
Fayoum ... ..	5	2	8	2	14	1	9	2	86	7	5.2
Gerga ... ..	6	3	10	2	19	—	15	1	50	6	3.8
Giza ... ..	12	9	41	15	98	39	66	20	217	83	24.7
Minia ... ..	2	—	15	1	14	6	4	5	12	35	3.3
Qena ... ..	9	3	6	3	7	6	8	1	30	13	2.6
<b>TOTAL Upper Egypt</b>	<b>55</b>	<b>23</b>	<b>113</b>	<b>28</b>	<b>194</b>	<b>65</b>	<b>118</b>	<b>37</b>	<b>480</b>	<b>153</b>	<b>5.6</b>
<b>GRAND TOTAL ...</b>	<b>444</b>	<b>78</b>	<b>1,122</b>	<b>161</b>	<b>2,634</b>	<b>373</b>	<b>1,313</b>	<b>197</b>	<b>5,513</b>	<b>814</b>	<b>28.2</b>



## Diphtheria

TABLE NO 25.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Population
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	111	19	185	43	302	69	352	57	950	188	44.5
Alexandria ... ..	66	15	32	5	56	16	69	14	223	50	23.4
Ismailia ... ..	—	—	—	—	1	—	7	—	8	—	7.1
Port-saïd... ..	14	3	5	1	13	3	17	3	49	10	26.6
Suez... ..	—	—	—	1	2	3	1	—	3	4	5.4
Damietta ... ..	6	3	3	2	9	7	15	9	33	21	29.4
<b>TOTAL Governorates</b>	<b>197</b>	<b>40</b>	<b>225</b>	<b>52</b>	<b>383</b>	<b>98</b>	<b>461</b>	<b>83</b>	<b>1,266</b>	<b>273</b>	<b>35.7</b>
Frontier Districts ...	—	—	—	—	—	—	—	—	—	—	—
Behera ... ..	4	3	4	1	14	11	9	7	31	22	2.4
Dakahlia ... ..	6	5	7	9	16	12	14	6	43	32	3.0
Gharbia ... ..	5	3	5	3	23	20	44	25	77	51	3.2
Menoufia... ..	2	3	9	5	21	25	24	22	56	55	4.7
Kaliubia ... ..	7	2	2	3	23	13	31	15	63	33	8.8
Sharkia ... ..	9	5	10	2	19	9	16	11	54	27	4.0
<b>TOTAL Lower Egypt</b>	<b>33</b>	<b>21</b>	<b>37</b>	<b>23</b>	<b>116</b>	<b>90</b>	<b>138</b>	<b>86</b>	<b>324</b>	<b>220</b>	<b>3.9</b>
Aswan ... ..	3	4	—	2	3	1	8	9	14	16	4.7
Assiut ... ..	7	6	8	4	11	6	19	11	45	27	3.2
Beni-Suef ... ..	2	3	4	2	1	1	4	5	11	11	1.7
Fayoum ... ..	1	—	—	1	1	4	5	2	7	7	1.0
Gerga ... ..	3	1	2	3	3	6	10	8	18	18	1.4
Giza ... ..	20	5	16	9	37	24	32	13	165	51	11.9
Minia ... ..	2	3	1	—	2	3	11	7	16	13	1.5
Qena ... ..	—	4	4	3	8	5	17	11	29	23	2.6
<b>TOTAL Upper Egypt</b>	<b>38</b>	<b>26</b>	<b>35</b>	<b>24</b>	<b>66</b>	<b>50</b>	<b>106</b>	<b>66</b>	<b>245</b>	<b>166</b>	<b>3.3</b>
<b>GRAND TOTAL ...</b>	<b>268</b>	<b>87</b>	<b>297</b>	<b>99</b>	<b>565</b>	<b>238</b>	<b>765</b>	<b>235</b>	<b>1,835</b>	<b>659</b>	<b>9.4</b>

## Cerebro Spinal Meningitis

TABLE NO. 26.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Population
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	14	1	11	1	12	4	11	1	48	7	2.3
Alexandria ... ..	1	1	4	4	1	1	2	1	8	7	0.8
Ismailia ... ..	—	—	—	—	—	—	—	—	—	—	—
Port-Saïd ... ..	27	7	18	2	3	—	3	—	51	9	27.7
Damietta ... ..	—	—	—	—	—	—	—	—	—	—	—
Suez... ..	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL Governorates</b>	<b>42</b>	<b>9</b>	<b>33</b>	<b>7</b>	<b>16</b>	<b>5</b>	<b>16</b>	<b>2</b>	<b>107</b>	<b>23</b>	<b>3.0</b>
Frontier Districts ...	—	—	7	2	—	—	—	—	7	2	4.0
Behera ... ..	—	—	—	—	1	—	—	—	1	—	0.8
Dakahlia ... ..	2	—	4	4	—	—	—	—	6	4	0.4
Gharbia ... ..	—	—	2	3	—	—	—	—	2	3	0.08
Menoufia... ..	—	—	—	1	—	—	—	—	—	1	—
Kaliubia ... ..	—	—	—	—	—	—	—	—	—	—	—
Sharkia ... ..	1	1	6	2	—	—	—	—	7	3	0.5
<b>TOTAL Lower Egypt</b>	<b>3</b>	<b>1</b>	<b>12</b>	<b>10</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>16</b>	<b>13</b>	<b>0.2</b>
Aswan ... ..	—	—	—	—	—	—	—	—	—	—	—
Assiut ... ..	—	—	—	—	—	—	—	—	—	—	—
Beni-Suef ... ..	—	—	1	—	—	—	—	—	1	—	0.2
Fayoum ... ..	—	—	—	—	—	—	—	—	—	—	—
Gerga ... ..	—	—	—	—	—	—	—	—	—	—	—
Giza ... ..	—	—	—	1	—	—	—	—	—	1	—
Minia ... ..	—	—	—	—	1	—	—	—	1	—	0.09
Qena ... ..	—	—	1	—	—	—	—	—	1	—	0.09
<b>TOTAL Upper Egypt</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3</b>	<b>1</b>	<b>0.04</b>
<b>GRAND TOTAL ...</b>	<b>45</b>	<b>10</b>	<b>54</b>	<b>20</b>	<b>18</b>	<b>5</b>	<b>16</b>	<b>2</b>	<b>133</b>	<b>37</b>	<b>0.7</b>

### Whooping Cough

TABLE NO. 27.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Popula- tion
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	16	1	39	2	27	3	20	2	102	8	4.8
Alexanadria ... ..	10	2	27	—	38	2	11	—	86	4	9.0
Ismailia ... ..	—	—	—	—	—	—	—	—	—	—	—
Port-Saïd ... ..	—	—	—	—	—	—	—	—	—	—	—
Damietta ... ..	—	—	—	—	—	—	—	—	—	—	—
Suez... ..	1	—	4	—	—	—	—	—	5	—	4.5
<b>TOTAL Governorates</b>	<b>27</b>	<b>3</b>	<b>70</b>	<b>2</b>	<b>65</b>	<b>5</b>	<b>31</b>	<b>2</b>	<b>193</b>	<b>12</b>	<b>5.4</b>
Frontier Districts ...	33	3	11	—	—	—	1	—	45	3	26.0
Behera ... ..	—	—	4	—	4	1	1	—	9	1	0.7
Dakahlia ... ..	—	—	45	—	21	3	16	1	82	4	5.6
Gharbia ... ..	2	—	52	—	6	—	10	—	50	—	2.1
Menoufia ... ..	—	—	24	—	15	1	18	—	57	1	4.8
Kaliubia ... ..	4	—	9	—	2	—	3	—	18	—	2.5
Sharkia ... ..	2	2	2	—	1	—	1	—	6	2	0.4
<b>TOTAL Lower Egypt</b>	<b>8</b>	<b>2</b>	<b>116</b>	<b>—</b>	<b>49</b>	<b>5</b>	<b>49</b>	<b>1</b>	<b>222</b>	<b>8</b>	<b>2.6</b>
Aswan ... ..	—	—	—	1	—	—	1	—	1	1	0.3
Assiut ... ..	10	2	4	—	—	—	—	—	14	2	1.0
Beni-Suef ... ..	—	—	2	—	1	—	—	—	3	—	0.5
Fayoum ... ..	1	—	93	—	2	—	—	—	96	—	13.9
Gerga ... ..	9	—	31	—	—	—	—	—	40	—	3.2
Giza ... ..	5	—	49	—	4	—	2	—	60	—	6.8
Minia ... ..	—	—	6	—	—	—	4	—	10	—	3.9
Qena ... ..	76	1	10	—	—	—	—	—	86	1	7.6
<b>TOTAL Upper Egypt</b>	<b>101</b>	<b>3</b>	<b>195</b>	<b>1</b>	<b>7</b>	<b>—</b>	<b>7</b>	<b>—</b>	<b>310</b>	<b>4</b>	<b>4.2</b>
<b>GRAND TOTAL ...</b>	<b>169</b>	<b>11</b>	<b>392</b>	<b>3</b>	<b>121</b>	<b>10</b>	<b>88</b>	<b>3</b>	<b>770</b>	<b>27</b>	<b>3.9</b>



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## Measles

TABLE NO. 28.—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Popul- ation
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	63	19	1,177	703	699	507	49	21	1,988	1,250	93.2
Alexandria ... ..	16	—	120	10	166	19	392	18	694	47	72.8
Ismailia ... ..	—	—	18	24	1	15	—	—	19	29	17.0
Port-Saïd ... ..	56	18	79	139	8	30	1	—	144	187	78.2
Damietta ... ..	—	—	—	—	—	—	7	—	7	—	12.6
Suez... ..	17	—	39	1	13	1	—	—	69	2	61.5
<b>TOTAL Governorates</b>	<b>152</b>	<b>37</b>	<b>1,433</b>	<b>877</b>	<b>887</b>	<b>572</b>	<b>449</b>	<b>39</b>	<b>2,921</b>	<b>1,525</b>	<b>82.3</b>
Frontier Districts ...	36	26	25	8	26	8	114	16	201	58	116.2
Behera ... ..	22	8	51	8	24	7	—	—	97	23	7.6
Dakahlia ... ..	66	20	140	38	420	87	8	—	634	145	43.6
Gharbia ... ..	7	—	37	11	26	21	9	2	79	34	3.3
Menoufia... ..	20	—	73	9	196	17	101	5	390	31	32.5
Kaliubia ... ..	13	1	249	16	179	38	46	2	487	57	68.3
Sharkia ... ..	8	2	100	68	157	54	15	3	208	127	20.8
<b>TOTAL Lower Egypt</b>	<b>136</b>	<b>31</b>	<b>650</b>	<b>150</b>	<b>1,002</b>	<b>224</b>	<b>179</b>	<b>12</b>	<b>1,967</b>	<b>417</b>	<b>23.4</b>
Aswan ... ..	1	—	—	—	2	1	—	—	2	1	1.0
Assiut ... ..	105	9	60	16	71	30	50	40	386	95	20.3
Beni-Suef ... ..	—	—	3	4	—	8	—	—	3	12	0.5
Fayoum ... ..	5	—	25	1	37	10	91	10	158	21	22.9
Gerga ... ..	2	—	6	1	15	5	2	2	25	8	1.9
Giza ... ..	37	6	263	75	116	58	54	3	470	142	53.4
Minia ... ..	24	4	120	20	87	15	67	3	298	42	27.7
Qena ... ..	4	8	50	36	48	16	51	27	153	87	13.5
<b>TOTAL Upper Egypt</b>	<b>178</b>	<b>27</b>	<b>527</b>	<b>153</b>	<b>376</b>	<b>143</b>	<b>315</b>	<b>85</b>	<b>1,396</b>	<b>408</b>	<b>18.8</b>
<b>GRAND TOTAL ...</b>	<b>502</b>	<b>121</b>	<b>2,635</b>	<b>1,188</b>	<b>2,291</b>	<b>947</b>	<b>1,057</b>	<b>152</b>	<b>6,485</b>	<b>2,408</b>	<b>33.2</b>

### Acute Poliomyelitis

TABLE NO. 29—QUARTERLY DISTRIBUTION OF CASES, DEATHS AND CASE-RATES  
PER 100,000 OF POPULATION, 1948

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate pe 100,000. Popula- tion
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	—	—	—	—	—	1	—	—	—	1	—
Alexandria ... ..	1	—	—	—	—	2	2	—	3	2	0.3
Ismailia ... ..	—	—	—	—	—	1	—	—	—	1	—
Port-Saïd ... ..	—	—	—	—	—	—	—	—	—	—	—
Damietta ... ..	—	1	—	—	—	—	—	—	—	1	—
Suez... ..	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL Governorates</b>	<b>1</b>	<b>1</b>	—	—	—	<b>4</b>	<b>2</b>	—	<b>3</b>	<b>5</b>	<b>0.08</b>
Frontier Districts...	—	—	—	—	—	—	—	—	—	—	—
Behera ... ..	—	—	—	—	—	—	—	—	—	—	—
Dakahlia ... ..	—	—	—	—	—	—	—	—	—	—	—
Gharbia ... ..	—	—	1	—	1	2	1	1	3	3	0.1
Menoufia... ..	—	—	—	—	—	—	—	—	—	—	—
Kaliubia ... ..	—	—	—	—	—	—	—	—	—	—	—
Sharkia ... ..	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL Lower Egypt</b>	—	—	<b>1</b>	—	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>0.04</b>
Aswan ... ..	—	—	—	—	—	—	—	—	—	—	—
Assiut ... ..	—	—	—	—	—	—	—	—	—	—	—
Beni-Suef ... ..	—	—	—	—	—	—	—	—	—	—	—
Fayoum ... ..	—	—	—	—	—	—	—	—	—	—	—
Gerga ... ..	—	—	—	—	—	—	—	—	—	—	—
Giza ... ..	—	—	—	—	—	—	—	—	—	—	—
Minia ... ..	—	—	—	—	—	—	—	—	—	—	—
Qena ... ..	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL Upper Egypt</b>	—	—	—	—	—	—	—	—	—	—	—
<b>GRAND TOTAL ...</b>	<b>1</b>	<b>1</b>	<b>1</b>	—	<b>1</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>8</b>	<b>.03</b>

TABLE No. 30.—NUMBER OF PERSONS IMMUNISED AGAINST PLAGUE, TYPHOID, TYPHUS, SMALL-POX, CHOLERA AND DIPHTHERIA,  
IN GOVERNORATES AND PROVINCES, 1948.

Localities	Plague		Typhoid		Typhus			Small-Pox		Cholera		Diphtheria		
	One Inj.	Two Inj.	One Inj.	Two Inj.	One Inj.	Two Inj.	Three Inj.	New-Born Vaccinated	Protective Vaccination	One Inj.	Two Inj.	One Inj.	Two Inj.	Three Inj.
Cairo ... ..	—	—	127,226	127,226	53,250	53,250	53,250	100,517	552,074	—	2,026,904	75,853	70,743	67,825
Alexandria ... ..	—	—	209,411	61,028	158	67	—	43,543	238,442	1,285,959	—	44,078	41,073	40,734
Canal ... ..	—	—	—	10,348	—	—	—	14,196	652	—	809	332	360	9,070
Suez ... ..	—	—	77	873	—	23	—	5,718	91,968	—	105,037	132	260	4,420
Damietta ... ..	—	—	65	2,800	—	—	—	4,020	—	126,561	295	621	812	2,629
Frontier Dist. ... ..	—	—	12,594	15,213	4,619	2,038	—	6,789	104,197	120,096	72,213	10	37	471
Behera... ..	29	29	681	3,533	11,711	8,167	35	46,005	225,483	1,210,254	237	7,669	6,173	6,275
Dakahlia ... ..	61	—	361	1,728	—	25	—	42,008	313,359	575,556	213,895	1,200	1,093	8,393
Gharbia ... ..	—	—	—	3,546	—	—	—	87,916	645,031	—	64,864	396	699	15,315
Menoufia ... ..	—	—	1,477	3,086	774	170	—	43,424	355,291	671,486	187,962	2,232	2,009	4,642
Kaliubia ... ..	—	—	15	1,543	—	—	—	29,951	207,544	691,748	—	2,175	1,778	4,778
Sharkia ... ..	—	—	1,314	2,176	111	105	105	45,265	185,138	914,682	87,806	8,905	8,927	8,927
Aswan ... ..	40	40	—	257	—	—	—	7,005	50,301	286,239	—	1,178	880	1,473
Assiut ... ..	—	—	814	1,130	—	—	—	49,530	317,990	1,226,169	—	4,881	4,868	6,594
Beni-Suef ... ..	—	—	—	868	—	—	—	20,885	178,871	595,297	652	3,236	989	3,329
Fayoum ... ..	—	—	—	963	—	—	—	27,747	197,151	—	65,506	410	416	4,420
Gerga ... ..	—	100	—	1,397	—	—	—	40,680	334,429	1,201,331	945	800	874	1,528
Giza ... ..	77	77	1,910	3,088	—	—	—	59,086	95,714	798,390	—	7,937	4,837	4,857
Minia ... ..	—	531	13	1,220	78	12	—	34,729	72,180	794,653	14,348	632	387	5,893
Qena ... ..	—	—	280	810	—	—	—	31,217	374	1,116,500	—	1,165	403	3,542
TOTAL ... ..	207	777	356,238	242,824	70,701	63,857	53,390	740,231	4,166,289	11,614,903	2,841,623	163,948	147,618	205,115



## Chapter III. — Permits Licensing of Public Establishments

No comprehensive report on the issue of licences for public establishments could be compiled in the past since this work was undertaken by diverse authorities in different ministries.

Now that a Permits Department has been set up, a full report demonstrating the extent of industrial progress in Egypt can be submitted

For many years past, complicity of measures attending the issue of licences for public establishments covered by law No. 13 of 1904 was the subject of common complaint. Attempts towards simplification of procedure have repeatedly been made but with no avail. It was for this purpose that the Permits Department was set up to unify these measures and simplify procedure.

In 1947, the strength of the Department was 33 officials inclusive of 10 engineers and three medical officers. In 1948, their number reached 99 with 47 engineers and three medical officers most of whom were posted to the provinces and governorates as a means for decentralization of the work. Thus much time and correspondence have been saved and the public spared the expense of coming to Cairo to discuss sanitary conditions or plans of premises.

The department was reorganized in 1948 and now comprises the following three services besides the Central Administration :

1) Permits Service. (2) Inspection and technical research Service. (3) Statistics Service.

I. — *Licences Granted* : During 1947 and 1948, the department issued 861 and 966 licences for Schedule I establishments respectively as compared with 736 and 787 during 1933 and 1934 respectively.

II. — *New Licences* :

The number of applications for new licences received by the Department during 1947 and 1948 was 1750 and 1795 respectively. These were 228 in 1922 and 1026 in 1926.

Those figures and the following tables demonstrate the great and steady progress achieved by industry in Egypt, and emphasize the need for simplified and abridged procedures which would not impair the interests of either the department or the individuals.

The Department therefore attempted to simplify the procedure of granting licences to new establishments. It was decided to dispense with the opinion of the Public Health authority. Instead, the department's medical officers would join the engineer when surveying new establishments. This arrangement reduced the time delay for issuing a new licence to less than two months as shown in table No. 32.

The regular inspection of unhealthy, inconvenient and dangerous establishments is no less important since it is provided for under Law No. 13 of 1904. The object is two fold:

(a) to prevent the exploitation of establishments without licences; (b) to ensure that licensed establishments fulfil the sanitary conditions. Hence an Inspection Service has been set up in the Department towards the end of 1948. To this service was incorporated an office for such technical researches as may be required by the Department or other interested authorities.

During the short interval between 15/11/48 and the end of the year and with its limited personnel, this Service inspected 194 establishments in governorates and provinces. Of this number, 68 establishments were found exploited without licences, 108 establishments lacked sanitary conditions and only 18 establishments fulfilled sanitary requirements.

Inspection fees collected were L.E. 51,712.004  $\frac{m}{m}$  in 1932; L.E. 52,103.093  $\frac{m}{m}$  in 1934; L.E. 64,250.498  $\frac{m}{m}$  in 1942; L.E. 73,684.445  $\frac{m}{m}$  in 1946 and L.E. 84,957.181  $\frac{m}{m}$  in 1948.

During the year under review a committee was convened to draft a new petroleum Regulations. The International petroleum conference was held in Alexandria during the year and was attended by representatives of the Department.

It is hoped that, with the support of the Ministry, the Department will manage to set up units in the Governorates and Provinces to undertake this work instead of the public health inspectorates who are now doing it but who have more important duties to perform.

TABLE No. 31.—EXAMPLES OF TIME DELAY TAKEN TO ISSUE A LICENCE PRIOR TO 1948.

Industry	Locality	Date of application	Date of issue	Time Delay	
				Year	Month
Confectionary ... ..	Menouf ... ..	23-8-1931	4-11-1948	17	2
Wheat and Rice Mill ... ..	Mansoura ... ..	10-12-1940	13-12-1948	8	3
„ „ „ ... ..	Tanta ... ..	4- 4-1942	6-12-1948	6	8
„ „ „ .. ..	Santa ... ..	20- 3-1943	28-10-1948	5	7
Mill for Tanning substances	Old Cairo ... ..	2- 5-1944	13-12-1948	4	7
Confectionary ... ..	Zagazig... ..	25-12-1945	7-10-1948	2	10
Blacksmith Workshop ... ..	Damanhour ... ..	14- 1-1946	15-12-1948	2	11
Oven for roasting peanuts ..	Mehalla Kobra	20- 1-1947	11-10-1948	1	8

TABLE No. 32.—EXAMPLES OF TIME DELAY TAKEN TO ISSUE LICENCES DURING 1948.

Industry	Locality	Date of application	Date of issue	Time Delay	
				Month	day
Metal Turnery ... ..	Alexandria ... ..	3- 3-1948	2-10-1948	6	29
Motor Driven Foundry ... ..	Bab El Shaaria	29- 3-1948	5-10-1948	6	6
Nailery ... ..	Mousky ... ..	18- 5-1948	9-10-1948	4	21
Acetylene Welding Workshop	Rod El Farag	2- 6-1948	10-10-1948	4	8
Motor Driven Shoe Factory	Gamalia ... ..	14- 6-1948	20-10-1948	4	6
Battery charging Workshop	Rod El Farag	6- 7-1948	1-11-1948	3	25
Motor driven metal turnery	Waili ... ..	27- 7-1948	10-11-1948	3	13
Acetylene Welding Workshop	Shubra ... ..	29- 7-1948	25-11-1948	3	26
Confectionary ... ..	Sayed a Zeinab	26- 6-1948	19-12-1948	5	23
Match factory ... ..	Embaba .. ..	24- 4-1948	19- 6-1948	1	25
Syrup and Icecream Factory	Sayed a Zeinab	21- 3-1948	16- 5-1948	1	25



## Chapter IV. — Food Control

**TABLE NO. 33.—STATISTICS SHOWING WORK DONE BY FOOD CONTROL GANGS  
IN CUSTOMS HOUSES DURING 1948**

*A — Consignments Examined and Results of Samples taken therefrom.*

No. of Consignments Examined.	No. of Samples taken	Results of Analysis		
		Genuine	Unfit	Adulterated
21,625	948	773	142	33

*B — Foodstuffs Condemned or Refused entry into the Country*

Kind of Foods	Kilos	Cans or Bottles	Boxes and Sacks
<b>1.—Fresh Foods :</b>			
Vegetables ... ..	56,334	855	908
Fruits ... ..	76,668	—	193
Meat ... ..	1,219	267	—
Fish ... ..	178	—	—
<b>2.—Canned Foods :</b>			
Jams and Dried Fruits ... ..	76,667	769	646
Milk ... ..	184,174	848	312
Meat ... ..	1,348	4,929	177
Fish ... ..	536	240,56	2,132
Vegetables and sauce ... ..	3,003	8,218	1,834
<b>3.—Oils :</b>			
Oliveoil ... ..	13,583	170	15
Linseed oil ... ..	880	—	—
Butter and Masli... ..	251	273	9
Fat and Margarine ... ..	1,133	—	—
<b>4 —Other Foods :</b>			
Cheese ... ..	852	15,494	—
Four ... ..	239,293	—	5
Flour Products ... ..	2,348	31	—
Seeds and Corns... ..	91,803	—	1,306
Nuts and Almonds ... ..	33,882	—	—
Spices ... ..	16,247	1,301	6
Sweets and Chocolate ... ..	364	3,004	6
Honey ... ..	12	16,896	—
Sugar ... ..	1,107	—	—
Tea ... ..	16,298	343	197
Coffee ... ..	8,766	—	331
Cocoa ... ..	8,367	32	—
Alcoholic liquors... ..	—	83,971	1,038
Non alcoholic Drinks ... ..	2,218	836	—
Other kinds... ..	82,688	16,772	17,307
<b>TOTAL ... ..</b>	<b>537,519</b>	<b>311,525</b>	<b>26,422</b>



TABLE NO. 34—VARIOUS STATISTICS 1948

P.V. drawn up under article II of Law No. 48 of 1941	P.V. drawn up against Itinerant Vendors	P.V. drawn up against Milk Vendors	Bandars to which itinerant vendors regulations was applied	Bandars to which Milk Vendors regulations was applied	No. of itinerant Vendors licensed during 1948	No. of Milk Vendors licensed during 1948
1,803	10,818	5,691	4	—	1,584	231

TABLE NO. 35.— SAMPLES OF MILK TAKEN AND THE RESULT OF THEIR ANALYSIS 1948.

No. of Sample	Results of Analysis				Percentage
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by both	
11,797	10,820	628	318	31	8.2%

TABLE NO. 4.— SHOWING QUANTITIES OF FOODSTUFFS CONDEMNED AND NUMBER OF SAMPLES TAKEN IN THE GOVERNORATES AND PROVINCES  
(CAIRO AND ALEXANDRIA EXCLUDED) AND THE RESULTS OF THEIR ANALYSIS DURING 1948

Names of Articles	Foodstuffs Condemned						Samples taken				Percentage	
	Number	Bottle	Cans	Lbs	Oke	Number of Samples	Genuine	Adulterated	Unfit	Adulteration	Unfitness	
										%	%	
1.— <i>Fresh Foods:</i>												
Fruits and Vegetables	47,594	—	—	20,723	38,354	—	—	—	—	—	—	
Fish	649	—	4	3,330	5,984	—	—	—	—	—	—	
Meat	—	—	—	2,217	901	1	1	—	—	—	—	
Other Fresh Foods	847	—	—	83	649	—	—	—	—	—	—	
2.— <i>Cooked Foods</i>	23,378	2	20	1,343	2,282	2	2	—	—	—	—	
3.— <i>Canned Foods:</i>												
Jams	36	—	289	122	8	22	22	—	—	—	—	
Milk and its Products	40	94	57	18	3	5	4	1	—	20	—	
Fruits and Vegetables	156	175	1,389	379	2,190	44	32	—	12	—	27.2	
Meat	19	—	124	117	15	16	15	—	1	—	6.6	
Fish	1,513	—	1,528	3,128	218	32	24	1	7	3.1	21.8	
Other Canned Foods	985	60	162	1,468	206	31	23	7	1	22.5	3.2	
4.— <i>Oils:</i>												
Olive Oil	—	—	—	—	—	121	114	6	1	4.9	0.8	
Seasame Oil	—	—	—	15	1	369	355	5	9	1.3	2.4	
Linseed Oil	—	—	—	19	74	175	142	24	9	13.7	5.1	
Lettuce Oil	—	—	—	—	—	24	24	—	—	—	—	
Safflower Oil	—	—	—	—	—	1	1	—	—	—	—	
Cotton-Seed Oil	—	—	—	32	241	149	141	4	4	2.6	2.6	
Other Oils	—	—	—	107	56	35	32	—	3	—	8.5	





# Chapter V.—Rural Health

TABLE No. 37.—VARIOUS ACTIVITIES OF RURAL HEALTH CENTRES

Province	Number of Health Centres in Service	Population Served by health centres	Number of births in these centres	Number of Deaths		Vaccination against Sm. pox	Diphtheria inoculation			Infectious diseases cases						Food Inspections				
				Children 0—5 years	Above 5 years		1st. inj.	2nd inj.	3rd. inj.	Plague	Typhus	Relapsing fever	Typhoid	Cholera	Sm. pox	Other diseases	Foods Condemned	Fit	Adulte-rated	Unfit
Dakhia	12	240,685	11,043	3,103	2,435	10,488	523	448	371	—	9	—	14	—	—	407	824	473	11	25
Gharbia	8	122,689	6,005	2,081	1,241	4,277	121	109	95	—	—	—	7	—	2	507	153	80	32	1
Behera	13	267,827	8,541	2,329	2,443	41,373	717	525	349	—	—	—	3	—	—	121	1,655	204	6	25
Menoufia...	23	447,421	20,122	4,694	3,999	16,391	1,896	1,402	1,179	—	1	—	13	—	—	343	1,419	479	15	22
Kaliubia	10	147,843	11,785	2,502	1,512	5,501	1,110	570	561	—	—	4	100	—	1	117	451	138	6	10
Sharkia	7	179,062	7,179	1,982	1,287	5,854	139	121	124	—	4	—	13	—	—	124	506	38	6	—
Giza	8	193,254	9,150	3,038	1,871	7,211	1,845	842	800	—	4	—	22	—	1	398	819	252	15	2
Fayoum	3	73,901	3,112	1,077	660	3,074	316	287	247	—	—	—	14	—	9	160	346	80	2	1,430
Beni-Suef	4	74,981	2,897	867	728	19,850	276	205	124	—	—	—	3	—	—	30	185	158	2	—
Minia	10	209,149	9,298	1,883	799	2,474	1,769	1,535	1,148	—	—	—	3	—	—	161	242	85	—	5
Assiut	11	177,818	6,943	1,964	1,779	5,686	165	159	104	—	6	—	9	—	1	20	76	69	1	1
Gerga	6	147,919	3,857	736	1,214	3,192	37	37	37	—	1	—	2	—	—	24	9	44	2	—
Qena	9	259,492	7,840	1,691	1,903	7,643	181	139	109	—	—	—	5	1	—	247	46	82	1	—
Aswan	5	68,887	2,780	700	442	1,730	173	62	9	—	—	—	—	—	6	3	49	52	1	1
TOTAL	129	2,620,928	110,552	28,647	22,313	134,674	9,268	6,441	5,257	—	25	4	118	1	20	2,662	6,780	2,234	100	1,522

TABLE No. 37 (Contd.)

Medical Services and Endemic Diseases																					
Province	Endemic Diseases										Cases Admitted to I. P.	Operations		Ophthalmic cases		Out Patients					
	Schistosom. cases				Intestinal parasites				Dysentery cases				Out Patients	In Patients	New	Old					
	Examined	Positive	Started treatment	Inj.	Compl. treat.	Positive	Start. treat.	Inj.	Compl. treat.	Positive		oil ch. D.					Compl. tr. at.				
Dakhlia	57,778	50,566	4,636	8,223	1,726	4	361	23,391	15,217	12,502	77,584	5,011	12,565	1,462	12,664	7,888	400	344	2,424	163	221
Gharbia	51,717	26,260	5,694	5,117	929	102	573	164,824	11,064	6,889	40,088	1,481	11,373	238	3,560	6,439	31	24	105	23	2,704
Behera	63,151	49,617	5,582	13,044	1,407	34	363	21,094	14,019	10,242	66,715	5,903	8,001	1,241	2,192	2,564	268	451	1,843	246	332
Menoufia	81,264	102,863	5,967	15,855	2,412	299	459	36,863	21,405	16,500	109,298	6,791	16,418	979	11,427	10,043	130	327	2,249	281	280
Kaliubia	68,447	54,214	8,751	48,481	2,473	41	3,727	30,075	19,320	13,075	54,664	3,336	22,980	330	19,961	4,248	127	89	419	93	281
Sharkia	46,422	45,301	4,276	6,191	2,225	57	3,336	18,109	10,321	7,475	61,773	4,376	9,469	439	7,280	6,946	541	531	3,648	472	76
Giza	54,445	20,752	6,043	14,699	899	52	872	18,338	11,148	7,753	62,407	2,918	13,401	4,254	4,810	3,237	31	27	178	26	167
Fayoum	12,642	7,957	1,441	2,532	24	15	8	6,526	2,234	2,029	15,043	567	211	390	60	211	40	40	435	40	9
Beni-Suef	15,193	24,011	2,689	6,259	56	6	207	10,734	7,040	1,052	62,061	2,963	2,131	1,961	192	1,059	25	22	121	20	53
Minia	30,853	13,046	11,818	22,464	161	35	414	19,604	10,299	7,702	68,252	2,668	4,916	1,588	630	316	158	119	673	90	144
Assiut	35,477	40,048	3,415	4,102	352	—	—	8,612	5,437	4,551	34,814	3,573	1,039	748	166	701	102	96	493	75	29
Gerga	17,389	40,917	2,236	2,635	30	1	74	7,673	6,064	4,987	21,103	1,615	2,196	1,354	333	985	84	68	345	64	5
Qena	46,037	33,305	7,912	13,790	89	28	83	6,413	2,783	2,459	18,973	1,476	2,563	1,614	679	1,120	119	114	399	95	510
Aswan	7,004	6,846	1,606	2,829	5	—	—	1,429	684	590	2,122	113	23	5	18	23	117	17	22	17	—
TOTAL	587,819	515,763	72,066	166,221	12,788	684	10,477	227,285	137,035	102,806	116897	42,791	107,286	16,603	63,972	45,780	2,373	2,275	12255	1,708	4,705



TABLE No. 37 (Contd.)

Maternity and Child Health														
Province	Pregnants		Children	Syphilis cases					Deliveries			Home Visits		
	New	Old		Blood tests	Positive	Started treatment	Arsenic inj.	Bismuth inj.	Home deliveries	Deliveries in health centres	TOTAL	To Prenatals	To Postnatals	To Infants
Dakahlia	3,442	9,813	40,295	300	893	1,287	623	3,026	5,051	13	5,064	4,562	23,972	13,282
Gharbia	3,251	4,426	21,788	145	127	1,205	978	2,394	2,168	14	2,182	2,337	9,506	4,590
Behera	2,993	6,055	27,622	201	1,565	2,013	705	2,417	3,749	19	3,768	4,009	13,232	6,542
Menoufia	5,170	12,838	54,319	495	319	2,831	749	4,343	5,751	9	5,759	9,266	44,418	26,018
Kaliubia	3,361	10,468	26,973	153	215	1,485	1,982	3,306	2,629	31	2,660	3,846	18,198	5,490
Sharkia	1,697	7,376	33,982	124	169	789	232	1,498	1,268	4	1,272	1,900	7,688	2,524
Giza	3,059	10,622	46,149	315	311	2,580	3,054	3,396	4,015	15	4,030	4,059	20,455	10,716
Fayoum	809	593	887	83	83	453	—	433	793	—	793	813	2,632	2,224
Beni-Suef	3,257	2,768	7,357	35	62	160	100	2,981	1,706	14	1,725	1,085	8,035	2,235
Minia	2,024	6,558	15,377	298	—	2,386	647	1,629	2,106	2	2,108	5,947	12,862	9,700
Assuit	1,300	3,208	7,201	136	209	443	—	969	1,985	—	1,985	1,812	11,141	1,088
Gerga	104	160	109	31	20	106	25	212	130	—	130	19	623	179
Qena	140	341	1,218	4	4	4	4	27	146	—	146	277	822	488
Aswan	130	147	920	26	26	9	—	41	188	2	190	104	1,255	490
TOTAL	30,737	75,373	284,197	2,341	4,003	16,251	8,499	26,672	31,685	128	31,812	40,036	174,639	85,466



## Chapter VI. — Quarantine

### A. Foreward :

The sanitary situation throughout the country was progressing favourably since the beginning of the year as the cholera epidemic, which had broken out in September 1947, was on the decline. In fact, on January 31, Alexandria, Port-Saïd, Suez and Ismailia ports and their regions were declared clean from cholera, as well as all mudirias of Upper Egypt.

Further, the whole country was declared free from cholera on 11th February 1948, after which the Quarantine Administration exercised control measures on arrivals from Syria, where a few cases of cholera had been reported towards the end of December 1947. This emergency was of short duration, as the Syrian Government declared the country clean on 7th January 1948, no cases having been reported after 9th December 1947.

In view of hostilities in Palestine and the interruption of sanitary reports, the Quarantine Administration declared on 1st June 1948 that Palestine was contaminated for all diseases.

In January 1948, the Experts Committee of the Arab League met to discuss measures to be taken in case of an outbreak of a quarantinable disease in one of the neighbouring countries, as well as to study proposed amendments of the Sanitary Conventions and the establishment of a Regional Health Office for the Near East. Iraq, Lebanon, Palestine, Sudan and Saudi Arabia were represented. Among the decisions taken by the Committee were :

(1) Amendment of certain articles of the Sanitary Convention.

(2) Amendment of the draft Pilgrims Regulations which was drawn up by the WHO Experts Committee during its Alexandria session in April 1947, and incorporation of its provisions into the International Maritime Sanitary Convention so that the provisions of this Convention governing ordinary passengers shall now be applicable to pilgrims also.

(3) The existing organization comprising the Arab League countries, shall be the Regional organization for the Middle East and shall be incorporated into the World Health Organization.

### B.—Maritime Navigation :

The sanitary situation in the ports was satisfactory throughout the year as it appears from the following table :

TABLE No. 38.—QUARANTINABLE DISEASES REPORTED IN THE PORTS DURING THE YEAR 1948.

Port	Plague		Cholera		Smallpox		Typhus	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Alexandria ... ..	—	—	—	—	—	—	7 <sup>(1)</sup>	—
Port-Saïd ... ..	—	—	—	—	2 <sup>(2)</sup>	—	8	—
Suez... ..	—	—	—	—	3 <sup>(3)</sup>	—	1	—
El Tor ... ..	—	—	—	—	—	—	—	—
Damietta ... ..	—	—	—	—	—	—	—	—
Kosseir ... ..	—	—	—	—	—	—	3	—
Other ports ... ..	Abu Zenima, Safaga, Hurghada, Shellal, Kantara, Ras Ghareb, Rosetta, Abukîr, Marsa Matruh, Sollum : Nil							

(1) Including an imported case.

(2) Imported.

(3) Including an imported case.

*Inspection of Vessels :*

As provided for in Article 48 of the Quarantine Regulations, all vessels arriving at Egyptian ports must, before communicating with the shore, be medically inspected.

Vessels arriving from infected ports are subjected to a detailed medical inspection (arraisonnement).

In the tables that follow are given :

(1) List of localities declared infected during the year by the Quarantine Authority (Table No. 39).

(2) List of localities declared clean during the year by the Quarantine Authority (Table No. 40).

(3) Number of vessels subjected to simple medical inspection (Table No. 41).

(4) Number of vessels subjected to detailed medical inspection (Table No. 42).

(5) Cases of diseases found on vessels at their arrival in Egyptian ports (Table No. 43).

(6) Vaccinations carried out on board of vessels in Egyptian ports (Table No. 44).

(7) Passengers (Table No. 45).



TABLE No. 39.—LOCALITIES DECLARED INFECTED DURING THE YEAR 1948.

Date		Disease	Name of Country	Name of locality considered infected	Arrivals by:
January	3	Cholera ... ..	Syria ... ..	Whole territory ...	All routes.
„	3	Plague ... ..	China ... ..	„ „	Air and sea routes.
„	24	„ ... ..	Union of South Africa ... ..	{Cape Province ...	„ „
„	24	Smallpox ... ..	India ... ..	Calcutta ... ..	„ „
February	14	„ ... ..	Indochina ... ..	Haiphong ... ..	„ „
„	14	„ ... ..	Pakistan ... ..	Karachi ... ..	„ „
„	14	Plague ... ..	Union of South Africa ... ..	{Orange Free State	„ „
„	14	„ ... ..	Indonesia, Java Island ... ..	{Tegal ... ..	„ „
„	29	„ ... ..	Union of South Africa ... ..	Orange Free State, Heilborn district	„ „
March	8	„ ... ..	Indonesia, Java ..	Semarang ... ..	„ „
„	13	Typhus ... ..	Rumania... ..	Whole territory ...	„ „
„	25	Smallpox ... ..	Burma ... ..	{Rangoon and Moulmein ... ..	„ „
		„ ... ..	India ... ..	Bombay ... ..	„ „
April	8	Cholera ... ..	French Establishments in India ...	Chandernagor, Karikal, Pondicherry	„ „
May	20	Smallpox ... ..	Sudan ... ..	Mudiria Kordofan	All routes.
„	22	Plague ... ..	Tanganyika ... ..	Whole territory ...	„ „ „
		„ ... ..	India ... ..	{Calcutta and Bombay ... ..	Air and sea routes.
	27	Typhus ... ..	Tunisia ... ..	Tunis port ... ..	„ „
	29	Smallpox ... ..	„ ... ..	„ „ ... ..	„ „
June	1	All diseases ...	Palestine ... ..	Whole territory ..	All routes.
	12	Smallpox ... ..	Southern Rhodesia	„ „ ... ..	„ „
	17	Cholera ... ..	Burma ... ..	Akyab ... ..	„ „
	27	Smallpox ... ..	Nyassaland ... ..	Whole territory ...	„ „
July	17	Plague ... ..	Java Island ... ..	„ „ ... ..	„ „
August	16	Yellow Fever ...	Argentina ... ..	„ „ ... ..	„ „
	18	Cholera .. ...	China ... ..	Shanghai... ..	„ „
	18	Smallpox ... ..	Sumatra Island ...	Palembang ... ..	„ „
October	28	Plague ... ..	Azores Islands ..	Whole territory ...	„ „
December	2	Plague ... ..	{Union of South Africa ... ..	Orange Free State, Coppies district	Air and sea routes.
	12	Yellow Fever ...	{Panama Republic, including Panama Canal zone ...	Whole territory ...	„ „
	29	Small-pox ... ..	Philippines Islands	Mindoro Island ..	„ „
	30	Small-pox and Typhus ... ..	{Ethiopia ... ..	Whole territory ...	All routes.



TABLE No. 40.—RESTRICTIONS WERE WITHDRAWN FROM THE FOLLOWING LOCALITIES.

Date		Disease	Name of Country	Name of locality declared clean	Arrivals by;
January	28	Cholera ... ..	Syria ... ..	Whole territory ...	All routes.
February	29	Smallpox ... ..	Cyrenaica ... ..	„ „ ...	„ „
	29	Plague... ..	Union of South Africa .. ..	Cape province, Viljoenskroon	„ „
March	13	Cholera ... ..	Ceylon ... ..	Batticaloa and Trincomalee ...	Air and Sea Routes
	24	Plague... ..	Union of South Africa ... ..	Parys district (Orange Free State) ... ..	
May	1	„	„ „	Heilborn district (Orange Free State)	„ „ „
June	5	Cholera	Macao ... ..	Macao ... ..	„ „ „
		„ ... ..	China Hong-kong and Formosa	Whole territory ...	„ „ „
		„ ... ..	Japan ... ..	„ „ ...	„ „ „
		„ ... ..	Burma ... ..	Akyab and Rangoon	„ „
		„ ... ..	Siam ... ..	Bangkok ... ..	„ „ „
		„ ... ..	Malayan Union ...	Kelantan and Trengganau States ...	„ „ „
		Smallpox ....	Japan ... ..	Whole territory ...	„ „ „
		Plague... ..	Burma ... ..	Bassein ... ..	„ „ „
August ...	11	Smallpox ... ..	Burma ... ..	Moulmein ... ..	„ „ „
September	2	Yellow Fever ...	Argentina .. ..	Whole territory ...	„ „ „
„	22	Smallpox ... ..	Pakistan ... ..	Karachi ... ..	„ „ „
December	12	„ ... ..	Tunisia ... ..	Tunis port ... ..	„ „ „



TABLE No. 42.—DETAILED MEDICAL INSPECTION (ARRAISONNEMENT)

Port	Cargo	Passenger Vessels	Passenger & cargo	Sailing vessels & launches	Tankers	Postal	Warships	Various	TOTAL
Alexandria ...	—	—	867	74	39	205	8	—	<b>1,193</b>
Port-Saïd ...	2,513	299	425	134	2,390	—	298	—	<b>6,059</b>
Suez ... ..	1,768	239	338	190	2,456	—	—	105	<b>5,096</b>
El-Tor ... ..	—	*23	—	23	—	—	—	—	<b>46</b>
Kosseir ... ..	19	—	—	21	—	—	—	—	<b>40</b>
Damietta ..	—	—	—	21	—	—	—	—	<b>21</b>
Rosetta ... ..	—	—	—	4	—	—	—	—	<b>4</b>
Hurghada ..	5	—	—	31	—	—	—	—	<b>36</b>
Safaga ... ..	10	—	—	26	—	—	—	—	<b>36</b>
Kantara ... ..	—	—	—	—	—	—	—	—	—
Sollum ... ..	—	—	—	—	—	—	—	—	—
Ismailia ... ..	—	—	—	—	—	—	—	—	—
Abu Zenima ...	8	—	—	6	—	—	—	—	<b>14</b>
Marsa Matruh	8	—	—	14	—	—	—	—	<b>22</b>
Ras Ghareb ...	14	—	—	2	20	—	—	—	<b>36</b>
Abu-Kir ... ..	—	—	—	1	—	—	—	—	<b>1</b>
Borollos ... ..	—	—	—	—	—	—	—	—	—

\* Pilgrim ships

#### RIVER TRAFFIC

All Nile vessels arriving from the South are subjected to an inspection at the Shellal Quarantine Office, where passengers are examined and vaccinated, if necessary. Hides and skins, wool and animal products and debris arriving from the South are also controlled at Shellal.

The number of vessels arrived at Shellal in 1948 was 1327, including:

- 98 Passenger express steamers .
- 88 Passenger ordinary steamers.
- 19 „ special steamers.
- 471 „ and cargo steamers.
- 652 sailing vessels.

No case of quarantinable or infectious disease was found.

The Shellal Quarantine office carried out the vaccination of 22451 passengers against smallpox. The Office also controlled the certificates of inoculation against yellow fever and isolated 63 passengers who were not in possession of regular vaccination certificates against that disease.



TABLE No. 43.—QUARANTINABLE AND INFECTIOUS DISEASES  
FOUND ON BOARD VESSELS.

ALEXANDRIA :

No case.

PORT-SAÏD :

(a) Quarantinable diseases :	Nil.
(b) Infectious diseases : 109 cases on board 64 vessels, namely :	
48	Typhoid fever
1	Suspected plague
4	Chicken pox
5	Malaria
8	Fever
1	Bronchitis
1	Broncho-pneumonia with laryngitis
1	Bronchitis, convalescent of influenza
2	Mumps
5	Influenza
2	Pneumonia
1	Hemorrhage
10	Dysentery
2	Measles
9	Tuberculosis of the lungs
1	Hemorrhage from lungs
1	Erysipelas
1	Diphtheria
1	Skin rash
1	Congestion of chest
4	Tuberculosis
<hr/> <b>109</b> <hr/>	TOTAL

SUEZ :

(a) Quarantinable diseases :	
(i) one case of modified smallpox landed from the S/S "Haukefjell" arriving from Abadan on 18 July.	
(ii) one case of confluent smallpox landed from the Tanker "Thamesfield" arriving from Abadan on 3 November.	
(b) Infectious diseases : 960 cases on board 196 vessels, namely :	
36	Influenza
10	Whooping Cough
279	Tuberculosis of lungs
360	Malaria
20	Chicken pox
39	Measles
36	Pneumonia
2	Typhoid fever
150	Dysentery
2	Diphtheria
26	Mumps
1	Venereal disease
1	Anthrax
1	Poliomyelitis
4	Tuberculosis
1	Lethargy
1	Suspected fever
1	Leprosy
<hr/> <b>960</b> <hr/>	TOTAL

KANTARA :

Infectious diseases : 9 cases found on the train arriving from Palestine namely :

- 1 Typhoid
- 2 Paratyphoid
- 3 Influenza
- 2 Malaria
- 1 Contagious fever.

TABLE No. 44. — VACCINATIONS CARRIED OUT ON BOARD VESSELS

SUEZ :

- 94 members of crew of the s/s "Sontay" and 1231 passengers against smallpox
- 40 members of crew of the s/s "Haukefjell" from which a case of modified smallpox had been landed.
- 169 members of crew of the s/s "Modasa" against small pox
- 1 passenger arrived on the s/s "Semiramis" and 3 passengers arrived on the s/s "Zamalek" from Port-Sudan against small pox.
- 1 passenger arrived on the s/s "Bir Hakim" and 3 passengers arrived on the s/s "Gisala" against smallpox
- 94 members of crew of the s/s "Thamesfield" from which a case of smallpox was isolated.

SHELLAL :

22,451 passengers vaccinated against small pox.

TABLE No. 45.—PASSENGER CONTROL  
ARRIVALS

Port	I and II Class	III and IV Class	TOTAL
Alexandria ... ..	8,170	5,881	14,051
Port-Saïd ... ..	20,484	68,024	88,508
Suez ... ..	2,286	7,688	9,974
El-Tor ... ..	26,740 pilgrims	—	26,740
Kantara ... ..	5,904 (1)	1,331 (2)	7,235
Shellal ... ..	8,171	22,451	30,622
Safaga ... ..	—	1	1
Hurghada ... ..	—	—	—
Kosseir ... ..	—	—	—
Ras Ghareb ... ..	717	906	1,623
Marsa Matruh ...	—	—	175 military
Sollum ... ..	327	723	1,050
Ismailia ... ..	4,243	—	4,243

(1) Arrived by train.

(2) Arrived on camels.

# DEPARTURES

Port	I and II Class	III and IV Class	TOTAL
Alexandria ... ..	8,677	8,116	<b>16,793</b>
Port-Saïd .. ...	22,267	77,156	<b>99,423</b>
Suez ... ..	1,972	3,765	<b>5,737</b>
El-Tor ... ..	26,735 pilgrims	—	<b>26,735 pilgrims</b>
Kantara ... ..	1,625 <sup>(1)</sup>	—	<b>1,625</b>
Shellal ... ..	4,730	13,778	<b>18,508</b>
Ras Ghareb ... ..	537	675	<b>1,212</b>
Sollum ... ..	280	438	<b>718</b>
Ismailia ... ..	1,212	—	<b>1,212</b>
Kosseir ... ..	—	—	—

<sup>(1)</sup> Leaving by train.

## Control of Aerial Navigation

The operation of civil air lines became more regular and the number of companies using Egyptian aerodromes increased.

At the end of October 1948, Fouad El Awal Seaport (near Alexandria) was opened to aircraft. As a result Rod El Farag sea base ceased to be employed.

In November 1948, a ministerial arrêté was issued by the Ministry of War announcing that, as from the end of February 1949, all aircraft engaged in international traffic, will have to land at Farouk Airport, near Cairo and that air companies will have to make the necessary arrangements to that effect. But, owing to unforeseen circumstances, which occurred at the end of the year, the execution of this arrêté was postponed to a future date.

All aircraft arriving from yellow fever areas were dealt with in accordance with provisions of the ministerial arrêté of 20th August 1945, as modified by arrêté of 13th January, 1946. This arrêté provides that all aircraft coming from the South must alight at Luxor aerodrome where all sanitary measures will be taken, unless exempted by the delegate of the Quarantine Authority at Khartoum. Aircraft coming from the West, from yellow fever countries, will be dealt with under arrêté of 9th July 1947, providing for these aircraft to make their first landing at Marsa Matruh aerodrome.



TABLE No. 46.—AIRCRAFT DEALT WITH DURING 1948

Name of Airport	Landing	Departing	Aircraft disinfested	Reconnaissance	Arraignment
<i>Cairo :</i>					
Farouk ... ..	3,146	3,083	171	885	2,261
Almaza ... ..	5,293	5,246	425	957	4,336
Rod El Farag ... ..	697	703	38	344	353
<i>Luxor :</i>					
Land Aerodrome ... ..	475	475	387	—	475
Sea base ... ..	108	108	43	—	108
<i>Alexandria :</i>					
Fouad El Awal Land aerodrome ... ..	328	335	60	196	307
Sea base ... ..	175	175	—	—	—
<i>Marsa Matruh</i> ... ..	44	44	1	44	—
Port-Saïd ... ..	11	11	—	5	6
El Tor ... ..	53	53	12	53	—
Fayed (1) ... ..	906	889	188	430	476
<b>TOTAL ... ..</b>	<b>11,236</b>	<b>11,122</b>	<b>1,325</b>	<b>2,914</b>	<b>8,322</b>

TABLE No. 47.—PASSENGERS LANDED FROM AIRCRAFT

Name of Airport	Landing	Departing	Transit	Isolated	Remarks
Farouk ... ..	14,350	37,784	40,453	273	203 Irregular anti cholera certificates. 68 Irregular anti yellow fever certificates. 1 On request. 1 Insufficient address (for typhus).
Almaza ... ..	49,607	36,518	25,894	195	107 Irregular anti yellow fever certificates 88 Irregular anti cholera certificate.
Rod el Farag ... ..	11,394	12,373	10,658	48	44 Irregular anti cholera certificate. 4 Irregular anti yellow fever certificates.
Luxor(land aerodrome)	83	—	3,624	3	Irregular anti-yellow fever certificates.
Luxor (sea base) ...	5	—	2,214	13	-ditto-
Fuad el Awal ... ..	6,342	5,082	3,546	17	-ditto-
Marsa Mátruh ... ..	—	—	48	—	Irregular anti-cholera certificate.
Fayed (2) ... ..	6,217	6,469	1,555	5	Irregular anti yellow fever certificate.

(1) Military aircraft.

(2) All passengers are military.

# D. — *Anti Plague Work* :

The following are details of rat trapping in town and port areas carried out in Alexandria, Port-Said and Suez and their identification by the laboratories.

Fumigation of vessels is carried out under the International Sanitary Convention of 1926 which was amended in 1938. Fumigation is undertaken by either the Quarantine Administration who employ the Clayton Gas Process or the Imperial Chemical Industries who employ the Cyanide Process under supervision of the Qaurantine Administration. Since 1943, masters of vessels were given the option to use either process. In October 1948, the I.C.I. decided to discontinue this operation and was substituted by the Near East Chemical and Fumigation Co. as from the beginning of 1949.

TABLE No 12.—NUMBER OF RATS CAUGHT, DESTROYED OR EXAMINED IN THE PORTS.

Number and species of rats caught			Alexandria	Port-Said	Suez
R. Norvegicus ... ..	town ... ..	...	5,213	6,761	1,193
	port ... ..	...	369	515	348
R. Rattus ... ..	town ... ..	...	5,342	40	2
	port ... ..	...	1,023	545	36
Acomys Cahirinus ... ..	town ... ..	...	2,118	—	611
	port ... ..	...	182	—	483
TOTAL ... ..			14,247	7,861	2,672
Mice caught ... ..	town ... ..	...	—	493	333
	port ... ..	...	—	4,210	217
Rats killed or found dead ...	town ... ..	...	1,793	12	—
	port ... ..	...	—	88	—

No plague infected rats were found during the year.

TABLE No. 13.—FLEAS FOUND ON RATS CAUGHT

	Town		Port		TOTAL
	L.M.	X.Ch.	L.M.	X.Ch.	
<i>A.—Alexandria :</i>					
R. Norvegicus ... ..	347	336	48	31	762
R. Rattus ... ..	502	484	314	236	1,536
Acomys ... ..	—	—	—	—	—
<i>B.—Port-Said :</i>					
R. Norvegicus ... ..	100	552	46	300	998
R. Rattus ... ..	13	37	37	342	429
<i>C.—Suez :</i>					
R, Norvegicus ... ..	—	781	—	152	933
R. Rattus ... ..	—	—	—	—	—
Acomys ... ..	—	—	—	—	—

L.M. = *Leptopsylla Musculi*.

X. Ch. = *Xenopsylla Cheopis*.



TABLE No. 50.—VESSELS DERATISED

A.—Vessels deratised by the Quarantine Administration, by the Clayton Process (S02) :

Port of	Steamers	Sailing vessels and launches	TOTAL
Alexandria ... ..	11	4	15
Port-Saïd ... ..	4	—	4
Suez ... ..	7	—	7
TOTAL ... ..	22	4	26

B.—Vessels deratised by the Imperial Chemical Industries, Ltd. under the supervision of the Quarantine Administration ; by the Cyanide process.

Port of	Steamers	Sailing vessels and launches	TOTAL
Alexandria ... ..	17	1	18
Port-Saïd ... ..	2	—	2
Suez ... ..	5	—	5
TOTAL ... ..	24	1	25

C.—Certificates of Exemption from Deratisation issued to :

Port of	Steamers	Sailing vessels and launches	TOTAL
Alexandria ... ..	78	39	117
Port-Saïd ... ..	116	54	170
Suez ... ..	52	114	166
Rosetta ... ..	—	19	19
Kosseir ... ..	—	45	45
Damietta ... ..	—	23	23
TOTAL ... ..	246	294	540

D.—Rats found on board vessels :

Alexandria ... .. 496 R. Rattus found on board 33 vessels after deratization.  
Port-Saïd ... .. 37 R. found on board 7 vessels after deratization, including 3 R. Norvegicus and 34 R. Rattus.  
Suez ... .. 117 R. Rattus found on board 4 vessels after deratization.



### E. Pilgrimage:

On August 2, 1948, notice was published in the official Journal to the effect that, as from August 12, the usual quarantine measures would be applied to pilgrims transiting Egyptian territory on their way to the Hedjaz.

These measures which did not differ from those enforced in previous years, remained in force until the departure of the last pilgrim ship from Suez on October 8, 1948.

As from that date, the control measures of returning pilgrims, entered into force and remained so until closure of Tor camp and termination of the pilgrim season, on December 15, 1948.

### OUTWARD JOURNEY

#### (a) Egyptian Pilgrims:

*Vaccinations and inoculations:* As in previous years, all Egyptian pilgrims were subjected, before their departure, to a double anti cholera and anti typhoid inoculations and to antismallpox vaccination. The vaccination against smallpox was subject to the same conditions as enforced in 1945, viz:

1. — The pilgrim is simultaneously vaccinated against smallpox and inoculated against cholera and typhoid.

2. — If, on second inoculation against cholera and typhoid, the anti smallpox vaccination is found unsuccessful, the pilgrim is revaccinated, and told to report to the Health Office after 5 days.

3. — If again found unsuccessful, the pilgrim is vaccinated for a third time against smallpox.

*Transport of pilgrims:* The transport of Egyptian pilgrims to and from the Hedjaz was undertaken by the Misr Company for Sea Navigation, which assigned S/S. "Misr" and S/S. "Sudan" for the purpose. The S/S. "Taif" and "Talodi" of the Khedivial Mail Line carried foreign pilgrims with certain Egyptian pilgrims.

All these vessels were inspected and measured by the Quarantine Authorities before being allowed to transport pilgrims. After ensuring that the equipment and other installations were in conformity with the International Sanitary Convention of 1926, a certificate of measurement was delivered. The following steamers were issued with certificates of measurement by the Quarantine Authorities at Suez:

Name of Vessel	1st Class	2nd Class	Twindecks
S/S. "Zamalek" ... ..	8	—	426
S/S. "Sudan" ... ..	58	117	1,235
S/S. "Taif" ... ..	26	24	603
S/S. "Talodi" ... ..	26	20	603
S/S. "Misr" ... ..	54	117	1,235
S/S. "Rawdah" ... ..	107	118	458

A total of 20,106 Egyptian pilgrims left Suez for Jeddah during the period from August 15 to October 8, 1948.

#### (b) Foreign Pilgrims:

Foreign pilgrims who transit Egyptian territory on their way to the Hedjaz are generally one of the following:

1.—Pilgrims arriving at Port-Said on board pilgrim ships bound for Jeddah in transit through the Canal;

2. — Pilgrims arriving by train from Palestine through Kantara to Suez where they embark pilgrim ships for Jeddah.

On account of hostilities in Palestine, no transport of pilgrims through Kantara was organised this year.

3. — Pilgrims arriving by train from Libya at Sollum, thence to Alexandria and Suez for embarkation for Jeddah.

4. — Pilgrims arriving at Port-Saïd and Alexandria by ordinary vessels, thence proceed by land to Suez to embark for Jeddah.

*Pilgrims transiting the Canal on board pilgrim ships:*

Five pilgrim ships carrying 4,550 pilgrims arrived at Port-Saïd on their way to Jeddah through the Canal. Details of these steamers are :

Name of steamer	Date of arrival	Port of departure	Tonnage	Number of pilgrims
Rawdah ... ..	September 25	Beirut ... ..	2,867	246
Oxfordshire ... ..	„ 29	„ ... ..	5,539	1,023
Athos II ... ..	October 4	Bizerte ... ..	8,946	1,650
Oxfordshire ... ..	„ 5	Beirut ... ..	5,539	1,349
Rawdah ... ..	„ 6	„ ... ..	2,867	282
TOTAL ...				4,550

The nationalities of the pilgrims on board were:

Egyptiani ... ..	2
Afghani ... ..	2
Algerians ... ..	615
Iraqis ... ..	435
Iranians ... ..	1,337
Lebanese ... ..	183
Moroccans ... ..	611
Palestinians ... ..	2
Senegalese ... ..	142
Syrians ... ..	929
Tunisians ... ..	232
Turks ... ..	7
Ivory Coast ... ..	3
French Sudan ... ..	19
French Guinea ... ..	28
Cypriots ... ..	3
TOTAL... ..	4,550

All pilgrims were inspected on arrival and found in possession of regular certificates of inoculation. Measurements and sanitary conditions on board were checked and found satisfactory.

*Pilgrims arrived at the Western Frontier by land route :*

A total of 67 pilgrims arrived at the Western border in transit through Egyptian territory. The pilgrims were examined and found immunised against cholera, smallpox and typhoid.



# DEPARTURE OF PILGRIMS FROM SUEZ

A total of 20519 pilgrims left Suez for Jeddah on board pilgrim ships during the period from August 15 to October 8. This figure represents a great increase as compared with the last pilgrim season when only 6,871 pilgrims were able to proceed to the Hedjaz. The remainder were prevented from proceeding to the Hedjaz following the outbreak of the cholera epidemic towards the end of September 1947. In 1946, the pilgrims who embarked at Suez numbered 23,607 including 19,307 Egyptians.

TABLE No. 51.—DETAILS OF STEAMERS :

Name of steamer	Tonnage	Date of departure	No. of pilgrims		
			Egyptians	Foreigners	TOTAL
Zamalek (1) ... ..	928	August 15	47	155	202
Sudan (1) ... ..	5,029	23	1,252	—	1,252
Taif (1) ... ..	770	23	7	40	47
Sudan (2) ... ..	5,029	28	1,410	—	1,410
Sudan (3) ... ..	5,029	September 2	1,410	—	1,410
Zamalek (2) ... ..	928	2	20	24	44
Semiramis ... ..	263	2	—	2	2
Misr (1) ... ..	5,050	4	1,354	—	1,354
Sudan (4) ... ..	5,029	7	1,410	—	1,410
Talodi ... ..	770	7	—	3	3
Misr (2) ... ..	5,050	9	1,341	—	1,341
Sudan (5) ... ..	5,029	12	1,405	—	1,405
Misr (3) ... ..	5,050	14	1,393	—	1,393
Sudan (6) ... ..	5,029	18	1,372	—	1,372
Misr (4) ... ..	5,050	20	1,395	8	1,403
Zamalek (3) ... ..	928	21	16	22	38
Sudan (7) ... ..	5,029	23	1,306	—	1,306
Misr (5) ... ..	5,050	25	1,307	—	1,307
Rawdah (1) ... ..	2,867	27	88	24	112
Sudan (8) ... ..	5,029	28	1,197	—	1,197
Sudan (9) ... ..	5,029	October 4	1,142	3	1,145
Zamalek (4) ... ..	928	4	76	102	178
Misr (6) ... ..	5,050	6	1,115	10	1,125
Rawdah (2) ... ..	2,867	7	19	9	28
Youssef Zinal Aly Rida ...	771	8	24	11	35
TOTAL ... ..			20,106	413	20,519



The nationalities of the 413 pilgrims are as follows :

Algerians .....	8
Chinese .....	1
Hedjazians.....	294
Indians .....	2
Moroccans .....	10
Palestinians .....	5
Syrians .....	2
Libyans .....	5
Tunisians .....	64
Turks .....	6
Indonesians .....	3
Ceylonese .....	6
Yemenite .....	1
British .....	4
Dutch .....	1
Sudanese .....	1
<hr/>	
TOTAL ... ..	413

#### RETURN JOURNEY

Yom Arafat coincided this year with October 12, 1948.

The first returning pilgrims were 90 in number transported by 4 Saudi aircrafts which alighted at Tor on October 18, 1948. These were followed by another aircraft on October 19, carrying 22 pilgrims, 3 aircrafts on October 20 with 67 pilgrims and a 9th aircraft carrying 27 pilgrims on October 21.

On October 22, the first pilgrim ship, the s/s " Sudan ", arrived at Tor carrying 1,423 Egyptian pilgrims.

The last ship left Tor Lazaret on December 8, 1948. The camp was closed down and the pilgrim season declared ended on December 15. The season thus lasted 65 days.

During that period, 20 steamers and 53 aircraft landed 26,535 pilgrims at Tor. All pilgrims were subjected to the usual observation period of 48 hours for pilgrims arriving by sea and 3 days for those arriving by air. Pilgrims arriving by air before the declaration of a clean pilgrimage were however detained for 5 days in conformity with instructions of the Quarantine Administration. The five vessels carrying 4550 foreign pilgrims were not detained for observation but, after medical inspection at the camp, were allowed to proceed in quarantine to their respective destinations through the Suez Canal under provisions of article 142 of the International Sanitary Convention.

It is interesting to note that for the first time in the history of Tor Lazaret such an important number of aircraft landed pilgrims at the station. The number of aircraft in previous years never exceeded 5 (in 1947, nil ; in 1946, 5 ; in 1945, 5 ; in 1944, 1 aircraft)

*Sanitary condition* :—In view of the absence of cholera and plague in the Hedjaz, and the negative result of the individual examination of the stools of the 2815 pilgrims arrived by the first two pilgrim ships and 312 pilgrims arrived by aircraft, and as the clinical examination of these pilgrims was satisfactory, it was decided — on October 26 — to apply to Tor the provisions of article 142 of the International Sanitary Convention of 1926 and advise all interested countries of that decision.

TABLE No. 52.—DETAILS OF STEAMERS AND AIRCRAFT WHICH LANDED PILGRIMS AT TOR LAZARET

Name of steamer or aircraft	Net Tonnage or weight	Date of arrival at Tor		Date of departure from Tor		Proceeding to	Number of pilgrims landing		
							Egyptians	Foreign	TOTAL
SAT 9 ... ..	8,000 K.	Oct.	18	Oct.	22	Cairo	24	2	26
SAT 1 ... ..	8,000 „		18		22	„ ...	19	1	20
SAT 7 ... ..	8,000 „		18		22	„ ...	17	5	22
SAT 6 .. ...	8,000 „		18		22	„ ..	16	6	22
SAT 10 .. ...	8,000 „		19		23	„ ...	19	3	22
SAT 1 ... ..	8,000 „		20		24	„ ...	21	1	22
SAT 3 .. ...	8,000 „		20		24	„ ..	21	—	21
SAT 4 ... ..	8,000 „		20		24	„ ...	15	9	24
SAT 5 ... ..	8,000 „		21		25	„ ...	21	6	27
S/S. "Sudan"	5,029 T.		22		25	Suez...	1,423	—	1,423
SAT 9 ... ..	8,000 K.		22		26	Cairo ...	12	15	27
S/S. "Misr"	5,050 T.		24		27	Suez...	1,402	2	1,404
SAT 9 ... ..	8,000 K.		24		27	Cairo ...	24	3	27
V-PCAR...	8,000 K.		24		27	„ ...	—	25	25
SAT 4 ... ..	8,000 K.		25		28	„ ...	18	9	27
SAT -9 ... ..	8,000 K.		25		28	„ ...	23	5	28
SAT 7 ... ..	8,000 K.		25		28	„ ...	22	—	22
SAT 8 ... ..	8,000		25		28	„ ...	20	7	27
VT-CMZ	8,000 K.		25		28	„ ...	1	14	15
SAT 5 ... ..	8,000 K.		26		29	Cairo ...	20	7	27
SAT 8 .. ...	8,000 K.		26		29	„ ...	19	8	27
SAT 9 ... ..	8,000 K.		26		29	„ ...	22	5	27
SAT 5 ... ..	8,000 K.		27		30	„ ...	15	12	27
SAT 8 ... ..	8,000 K.		27		30	„ ...	25	2	27
SAT 9 ... ..	8,000 K.		27		30	„ ..	23	4	27
S/S. Misr	5,050 T.		28		31	Suez ..	1,404	1	1,405
SAT 4 ... ..	8,000 K.		28		31	Cairo ..	21	7	28
SAT 5 ... ..	8,000 K.		28		31	„ ...	26	1	27
SAT 9 .. ...	8,000 K.		28		31	„ ...	13	14	27
SAT 8 ... ..	8,000 K.		28		31	„ ..	21	6	27
SAT 3 ... ..	8,000 K.		29	Nov.	1	„ ...	8	14	22
SAT 4 ... ..	8,000 K.		29		1	„ ...	8	19	27
SAT 5 ... ..	8,000 K.		29		1	„ ..	11	16	27
SAT 8 ... ..	8,000 K.		29		1	„ ..	25	2	27
SAT 9 ... ..	8,000 K.		29		1	„ ...	18	7	25
SAT 10 ... ..	8,000 K.		30		2	„ ...	22	1	23
SAT 3 ... ..	8,000 K.		30		2	„ ..	20	1	21
SAT 10 ... ..	8,000 K.		31		3	„ ..	21	4	25
SAT 4 ... ..	8,000 K.		31		3	„ ...	20	7	27
S/S. Oxfordshire	5,439 T.		31	Oct	31	Beirut ...	—	1,032	1,032
S/S. Sudan	5,029 T.	Nov.	1	Nov.	1	Suez ...	1,447	4	1,451
SAT 3 ... ..	8,000 K.		1		4	Cairo ...	18	5	23
SAT 5 ... ..	8,000 K.		1		4	„ ...	26	1	27
SAT 5 ... ..	8,000 K.		2		5	„ ...	11	14	25
SAT 5 ... ..	8,000 K.		3		6	„ ...	14	15	29
S/S. Sudan	5,029 T.		5		8	Suez...	1,435	—	1,435
SAT 8 .. ...	8,000 K.		5		8	Cairo ...	3	25	28
SAT 5 ... ..	8,000 K.		5		8	„ ...	21	7	28
S/S. Athos II	8,947 T.		5		5	Byzerte ...	—	1,664	1,664
S/S. Rawdah	2,268 T.		6		6	Beirut ...	—	469	469
SAT. 1	8,000 K.		6		9	Cairo ...	15	7	22
SAT. 5	8,000 K.		6		9	„ ...	—	20	20
S/S. "Misr"	5,050 T.		8		10	Suez ...	1,413	2	1,415
SAT. 5	8,000 K.		8		11	Cairo ...	8	9	17
SAT. 9	8,000 K.		10		13	„ ...	16	6	22
S/S. Oxford-shire	5,439 T.		10		10	Beirut ...	—	980	980
S/S. "Misr"	5,050 T.		12		14	Suez ...	1,431	1	1,432
SAT. 1	8,000 K.		13		16	Cairo ...	11	8	19
S/S. "Talodi"	770 T.		14		16	Suez ...	137	112	249
S/S. "Sudan"	5,029 T.		15		17	„ ...	1,426	—	1,426



TABLE No. 52 (contd.)

Name of steamer or aircraft	Net Tonnage or weight	Date of arrival at Tor	Date of departure from Tor	Proceeding to :	Number of pilgrims landing		
					Egyptian	Foreign	TOTAL
SAT. 8... ..	8,000 K.	Nov. 16	Nov. 19	Cairo	8	22	30
S/S. "Rawdah" ... ..	2,267 T.	18	18	Beirut	—	405	405
SAT. 1... ..	8,000 K.	18	21	Cairo	6	15	21
S/S. "Misr"... ..	5,050 T.	19	21	Suez	1,467	3	1,470
SAT. 6.... ..	8,000 K.	20	23	Cairo	7	6	13
S/S. "Sudan" ... ..	5,029 T.	22	24	Suez	1,537	7	1,544
SAT. 5... ..	8,000 K.	22	25	Cairo	16	8	24
SAT. 7... ..	8,000 K.	24	27	"	9	4	13
S/S. "Misr"... ..	5,050 T.	26	28	Suez	1,533	1	1,534
SAT. 1... ..	8,000 K.	26	29	Cairo	3	13	16
S/S. "Sudan" ... ..	5,029 T.	29	Dec. 1	Suez	1,478	2	1,480
S/S. "Sudan" ... ..	5,029 T.	Dec. 3	5	"	1,477	—	1,477
S/S. "Misr" ... ..	5,050 T.	6	8	"	1,562	2	1,564
TOTAL ... ..					21,415	5,120	26,535



TABLE No. 53.—COMPARATIVE STATEMENT OF PILGRIMS LANDED  
AT TOR DURING THE LAST THREE PILGRIM SEASONS

Nationalities	1946 A.D. 1365 Heg.	1947 A.D. 1366 Heg.	1948 A.D. 1367 Heg.
Egyptians ... ..	20,390	7,279	21,415
Afghanis ... ..	17	7	4
Algerians ... ..	604	687	609
Chinese ... ..	—	—	2
British ... ..	22	10	5
Cypriots ... ..	5	—	3
Libyans ... ..	4	—	—
French ... ..	6	—	—
Ceylonese .. ...	—	—	21
Indians ... ..	11	18	187
Iranians ... ..	—	—	1,246
Iraqis ... ..	916	9	521
Indonesians ... ..	1	—	12
Lebanese ... ..	654	367	167
Greeks ... ..	—	1	—
Madagascarians... ..	2	—	—
Moroccans ... ..	580	830	593
Palestinians ... ..	2,081	1,389	7
Senegalese ... ..	177	—	241
Syrians ... ..	2,884	1,652	924
Transjordanians ... ..	54	13	3
Tripolitans ... ..	42	—	75
Tunisians ... ..	233	263	270
Turks ... ..	44	4,358	58
Saoudis ... ..	71	81	128
South Africans ... ..	20	—	21
Sierra Leone ... ..	7	—	—
Miscellaneous ... ..	2	3	23
<b>TOTAL ... ..</b>	<b>28,827</b>	<b>16,967</b>	<b>26,535</b>

# HOSPITAL ADMISSIONS

A total of 182 persons were admitted to hospital, consisting of 166 pilgrims and 16 non-pilgrims, including 98 men, 77 women, and 7 children.

TABLE No. 54

Medical cases	Male	Female
Enteritis ... ..	17	11
Pneumonia ... ..	7	2
Bronchitis ... ..	7	1
Pulmonary tuberculosis ... ..	1	—
Influenza ... ..	18	6
Heart failure ... ..	—	1
Diabetes ... ..	3	7
Rheumatism ... ..	3	2
Renal colic ... ..	2	—
Nervous diseases ... ..	5	2
Debility—Senility ... ..	2	9
Uremia ... ..	2	—
Chicken pox ... ..	1	—
Scabies ... ..	2	—
Skin diseases ... ..	9	23
Cases of non haemolytic vibrios ... ..	3	—
Minor diseases ... ..	1	1
Surgical cases ... ..	16	5
Gynaecology ... ..	—	5
Eye diseases ... ..	—	1
Relatives accompanying patients ...	4	3
	<b>103</b>	<b>79</b>

There were no cases of infectious diseases which required isolation apart from the case of chicken pox.

*Causes of death.*—7 deaths occurred during the pilgrim season among pilgrims, including 5 caused by enteritis, 1 by heart failure, 1 by uremia.

## LABORATORY

The laboratory carried out the bacteriological examination of all stools of the pilgrims arriving by the first three steamers and the aircraft. As regards the succeeding steamers 50 per cent of the stools were examined from early arrivals which ratio was gradually reduced until 10 per cent only were examined from last vessels.

6,783 specimens were examined in all of which 23 were found containing non agglutinating vibrios, viz.

- 18 from the sections
- 2 from the hospitals
- 3 from the crew of the s/s "Talodi"

Instead of carrying out the examinations, as in previous years, in collective tubes each containing 10 specimens, the stools were this year collected in individual tubes and examined individually.

Since the opening of the Lazaret and at regular short intervals, the water supply was examined and every time found satisfactory.

The pilgrims with vibrios were treated with sulphaguanidine, and specimens repeatedly taken until the vibrios entirely disappeared from the stools.

Of 7 water specimens from Zem-Zem well examined, non agglutinating vibrios were found in 5 viz :

- 1 non agglutinating and non hemolytic
- 4 non agglutinating and hemolytic.

Samples of dates brought by the pilgrims were also examined and found free from cholera vibrio, typhoid and dysentery microbes.



*F. Disinfection*

TABLE No. 55.—DISINFECTION BY CHEMICAL MEANS

	Alexandria	Port-Said	Suez	Shellal	Tor
Vessels disinfected by sulphur... ..	11	—	—	—	13
Railway trucks disinfected... ..	2	—	—	41	—
Cabins occupied by sick ... ..	2	8	23	—	—
Barges (mooring) ... ..	—	304	—	—	—
Water tanks disinfected ... ..	44	167	40	—	—
Water tanks purified ... ..	—	246	118	—	—
Barges and boats ... ..	78	10	35	—	1
Holds of vessels disinfected ... ..	119	10	14	—	—
Motor cars and transport carts ... ..	317	—	78	—	—
Effects of disinfection personnel ... ..	1,816	—	—	—	—
Effects of pilgrims by formol ... ..	—	—	—	—	102
Vessels carrying sick ... ..	—	—	6	—	—
Vessels disinfested (mosquitoes) ... ..	—	—	1,920	—	—
Boats carrying sick ... ..	—	—	10	—	—
Miscellaneous .. ..	—	—	137	—	—

TABLE No. 56.—DISINFECTION BY STEAM UNDER PRESSURE

	Alexandria	Port-Said	Suez	Shellal	Tor
Bales of wool and cotton rags ... ..	329 bales.	—	—	—	—
Parcels for Customs Administration (used clothes) ... ..	36 parcels	—	—	—	—
Post parcels (used clothes) ... ..	3315 ,,	—	—	—	—
Effects of porters ... ..	—	—	466 Kgs.	—	—
Number of stovefulls ... ..	—	—	194	—	—
Parcels disinfected without payment ...	—	4	—	—	—
Parcels and effects belonging to the Admi- nistration ... ..	—	—	4500 Kgs.	—	76
Effects of crews of sailing vessels ... ..	—	—	115 ,,	—	—
Effects of pilgrims ... ..	—	—	—	418	—
Effects belonging to passengers ... ..	—	29490 Kgs. (18256 Kgs 6811 blankets540 parcels 120 cases)	—	63	—
Effects for Customs Administration ... }	—	7038 Kgs.	—	—	—
	—	103 parcels	—	—	—

TABLE No. 57.—CONTROL OF WATER DISTRIBUTION TO VESSELS  
IN THE PORTS :

The bacteriological examination of water supplied to vessels in Ports was regularly maintained throughout.

	Alexandria	Port-Said	Suez
No. of specimens taken from taps supplying vessels ...	663	79	171
No. of specimens taken from water boats supplying vessels.	108	779	227
<i>Result of bacteriological examination :</i>			
Specimens found fit for use :			
taps ... ..	657	49	128
water boats .. ...	108	387	94
Specimens unfit for use :			
taps ... ..	6	30	43
water boats ... ..	—	392	133
Number of times water was purified ... ..	—	246	118
Number of cisterns and water boats disinfected and cleaned	44	167	40

TABLE No. 58. — CONTROL OF HIDES, SKINS AND ANIMAL DEBRIS

Article	Alexandria			Port-Said			Suez		Shellal		Tor	
	Import	Export	Transit	Import	Export	Transit	Import	Transit	Import	Export	Import	Transit
Ox hides... ..	932,937 kilos	34,419 kilos	—	102,015 kilos	—	25,403 bales	293,329 kilos	51,787 kilos	104 consign	—	—	—
Sheep and goat skins ...	2,000 pieces	12,000 pieces	—	—	—	—	14,249 pieces	13,769 pieces	—	190 pieces	—	—
Salted guts ... ..	5,038 kilos	57,301 kilos	837	—	—	—	539 kilos	—	—	—	—	—
Horns and hoofs ... ..	43 kilos	909,000 kilos	—	—	12,570 kilos	—	—	—	—	—	—	—
Wool ... ..	89,672,126 kilos	484,053 kilos	145,413 kilos	660,223 kilos	—	35,408 kilos	—	—	7 consigns	31 consigns	—	—
Animal hair ... ..	23,247 kilos	103,758 kilos	—	—	—	—	—	—	1 consign	—	—	—
Calcinated hair ... ..	—	302,654 kilos	—	—	—	—	—	—	—	—	—	—
Bones ... ..	254 kilos	—	—	—	—	—	—	—	—	—	—	—
Camel hides ... ..	—	—	—	—	—	—	—	(*) 4,607	—	—	—	—
Goat hair ... ..	—	—	—	—	—	75 bales	—	—	—	—	—	—
CONTROL OF RAGS, USED CLOTHES, ETC.												
Rags ... ..	—	10,220,431 kilos	—	11,997 kilos	146,822 kilos	—	13,989	—	—	—	—	—
Used clothes ... ..	—	—	—	—	—	56 cases 679 kilos	—	—	—	—	—	—
Used jute ... ..	—	—	—	246,804	28,005	58 bales	94	—	—	—	—	—

(\*) Infected by Anthrax



TABLE No. 59.—DETAILS OF SAMPLES OF SKINS, HIDES AND ANIMAL PRODUCTS EXAMINED DURING 1948

Nature of sample	Number	Positive for Anthrax	Negative result
ALEXANDRIA :			
Wool ... ..	251	—	251
Hides and skins ... ..	16	—	16
Shaving brushes ... ..	47	—	47
Hair ... ..	18	—	18
Salted intestines ... ..	6	1	5
Powder of bones ... ..	1	—	1
PORT-SAID :			
Wool ... ..	64	—	64
Hides and skins ... ..	11	—	11
Hair ... ..	1	—	1
SUEZ :			
Hides and skins ... ..	81	*3	78
Hair ... ..	1	—	1
ALMAZA (CAIRO) :			
Wool ... ..	9	—	9
Shaving Brushes ... ..	10	—	10
KANTARA :			
Hides and skins ... ..	1	—	1
ROD EL FARAG (CAIRO)			
Wool ... ..	3	—	3
CAIRO :			
Wool, ... ..	3	—	3
ASSIUT :			
Wool ... ..	1	—	1
SHELLAL :			
Wool ... ..	6	—	6
Hides and skins ... ..	58	—	58
TOTAL ... ..	588	4	584

\* A consignment of 4607 Kilos of camel hides in transit,

## Part II. - SOCIAL HYGIENE

### Chapter VII. - Maternity and Child Welfare

Herebelow are details of the work carried out by the Child Welfare Centres in Egypt during 1948.

TABLE No. 60.

Cases	Number
Old Pregnants ... ..	559,128
New Pregnants ... ..	124,356
Blood specimens taken for Wassermann Reaction ... ..	36,083
Positive for Wassermann Reaction... ..	2,429
Pregnants treated for syphilis... ..	887
Children " " " ... ..	466
Pregnants suffering from gonorrhoea ... ..	16,076
Children attending centres... ..	1,792,085
Cases of Enteritis ... ..	155,783
" " Pneumonia ... ..	123,028
" " Hereditary syphilis ... ..	15,142
" " Infectious Diseases ... ..	5,634
" " Skin Diseases ... ..	143,540
Other Diseases ... ..	242,371
Circumcisions... ..	1,886
Anti Small-pox vaccination ... ..	52,370
Anti Diphtheria inoculations ... ..	27,722
Lectures delivered by medical officers ... ..	7,480
Lectures delivered by midwives... ..	5,409
Lectures delivered by assistants ... ..	9,675
Visits to sick pregnant ... ..	199
" " " puerperals ... ..	1,569
" " " Infants ... ..	629
Confinements attended by medical officers ... ..	299
" " " midwives ... ..	14,132
" " " assistants ... ..	91,534
" undertaken at in-patient departments ... ..	2,661
Total Confinements ... ..	108,626
Confinements from outside (not registered) ... ..	9,045
" referred to hospitals ... ..	3,155
Registered pregnant delivered outside ... ..	1,984
Confinements occurred before arrival of personnel ... ..	17,782
Still Births full term ... ..	981
" " within first three months ... ..	125
" " " second " " ... ..	261
" " after sixth month ... ..	366
Maternal mortality due to childbirth ... ..	67
Infantile deaths within first month of life ... ..	638
Midwife visits to pregnant during 9th month ... ..	16,995
Assistants visits to pregnant during 9th month ... ..	31,850
Midwife visits to puerperal mothers ... ..	177,122
Assistants' " " " " " ... ..	194,281
Other visits by midwife ... ..	18,927
Assistants' visits to infants ... ..	1,335
Other visits by assistants ... ..	24,078
Cases of Eclampsia ... ..	111
" " Laceration of Perineum ... ..	562
" " Placentitis ... ..	75
" " Puerperal fever ... ..	164
" " High temperature ... ..	3,151
Urine samples examined ... ..	408,265
Diabetic before delivery ... ..	301
Preparturition albuminuria ... ..	8,128
Foods contributed ... ..	219,240 kgs.
Garments " " " " " ... ..	3,508
Cloth material contributed ... ..	6,093mets



## Chapter VIII.—Chest Diseases

### *Statistical data :*

Since the campaign against tuberculosis was first launched in Egypt in 1929 up till the end of 1947, a total of 76,619 positive T.B. cases were recorded. A further 8393 cases were detected during the year 1948, making a total of 85,012 cases at the end of 1948.

During the year, the following units were opened :—

- (1) A branch of Souhag Chest Diseases Dispensary at Gerga on January 18, 1948.
- (2) A branch of Tanta Chest Diseases Dispensary at Kafr el Zayat on October 25, 1948.
- (3) Zifta Chest Diseases Dispensary on July 3, 1948, thus cancelling Mit-Ghamr Branch.
- (4) In-patient Section at Zifta on September 15, 1948.

(5) Bacos Chest Diseases Dispensary (under Alexandria Municipality) on December 15, 1948.

Thus, the Chest Diseases units are as follows :

- 21 Dispensaries
- 15 Branch dispensaries
- 13 In-patient Sections within dispensaries
- 5 Sanatoria
- 2 Surgical T.B. Institutions
- 4 Preventoria
- 1 Colony for Convalescents.

The following are the occupations of T.B. patients detected during the year 1948 :—

- 420 *Tradesmen* : consisting of 123 food-stuff vendors, 52 poultry and cattle merchants, 81 grocers, 53 fruiterers and 111 other trades.
- 615 *Employees* : including 270 civil employees, 144 commercial employees ; 64 teachers, 137 other employments.
- 2643 *Craftsmen* : consisting of 104 cooks, 80 waiters, 217 barmen, 100 domestic servants, 81 servants (farrashes), 52 gate-keepers, 115 barbers, 97 laundrymen, 137 drivers, 152 tailors, 148 shoemakers, 100 carpenters, 58 painters, 121 building labourers, 226 employees in firms, 177 weavers, 220 mechanics, 44 printers, 414 other occupations.
- 1,670 *Farmers*
- 207 *Pupils*

2,838 *Unemployed*: including 1929 invalids, 402 children and 507 unemployed. Of 158204.

new patients examined during the year, 8,393 were found positive for Tuberculosis. Of these, 394 were children and the remaining 7,999 were adults.

Of 7,328 contacts (3129 children and 4199 adults) examined, 227 developed tuberculosis.

33,808 visits were paid this year by health visitors and 8,429 visits by medical officers to tuberculous patients.

Appended to this report are detailed statistical data on the work carried out by the various dispensaries and other institutions.



TABLE No. 61.— LIST OF THE DIFFERENT FORMS OF TREATMENT FOLLOWED  
IN THE DISPENSARIES AND RESULTS THEREOF.

1					2				
DOMICILIARY TREATMENT					ARTIFICIAL PNEUMOTHORAX				

TABLE NO 62—STATISTICS OF PATIENTS IN SANATORIA AND IN-PATIENT SECTIONS OF DISPENSARIES  
(MANSOURA, DAMIETTA, PORT SAID, ZAGAZIG, TANTA, DAMANHOUR, SHERBIN,  
ZIFTA, FAYOUM, MINIA, ASSIUT, SOUHAG, AND ASWAN) IN 1948

				Sanatoria					In-patient Sections in
				Almaza	Abbassia	Giza	Alexandria	Mehalla Kobra	Dispen- saries
BEFORE ADMISSION	No. of patients discharged ... ..			1,588	921	309	359	265	1,283
	Sputum	Positive ... ..		999	656	189	248	218	961
		Negative ... ..		589	265	120	111	47	322
	Lesion	Unilateral ... ..		765	321	140	208	146	870
		Bilateral ... ..		823	600	169	151	119	413
		Cavitary ... ..		412	542	49	208	52	824
	Temperature	Normal ... ..		937	307	220	290	164	811
		Abnormal ... ..		651	614	89	69	11	472
	General treatment ... ..			3,850	921	87	206	169	1,063
	Exercise „ ... ..			1,196	431	72	175	96	413
TREATMENT GIVEN	Gold therapy	No. of patients ...	29	19	—	—	—	—	14
		No. of injections ...	346	128	—	—	—	—	154
	Tuberc. Inj.	No. of patients ...	—	—	—	—	—	—	4
		No. of Injections...	—	—	—	—	—	—	26
	A. P.	Inductions ... ..	905	481	102	180	88	584	
		Refills ... ..	11,892	8,433	3,281	1,928	1,096	9,310	
	Extrapleural A.P. ... ..			—	—	—	—	—	9
	Phrenic Crush ... ..			335	188	26	—	25	94
	Pleuratomy... ..			38	—	2	—	—	—
	Aspiration ... ..			222	—	111	26	3	111
CAUSES OF DISCHARGE	Thoracoplasty ... ..			75	20	1	—	—	9
	Adhesiectomy ... ..			464	278	30	—	49	129
	Complications ... ..			—	294	—	—	—	91
	No. of other injections given ...			6,156	11,349	1,803	962	115	3,435
	Pts. went on leave and did not return			145	7	5	15	23	59
	At request	Pts. refused treatment	386	119	—	—	222	241	
		Pts. having special difficulties	74	490	192	128	115	126	
	With Agreement of Physician ... ..			983	305	112	344	99	817
	Weight	Increase of weight	1,002	419	167	204	172	806	
		Decrease of weight	397	87	51	66	55	180	
Temperature	Stationary ... ..	189	415	91	89	38	353		
	Normal ... ..	1,231	515	233	304	186	951		
Sputum	Abnormal ... ..	357	406	76	55	79	332		
	Still positive ...	757	287	184	160	173	654		
	Still negative ...	723	261	66	93	42	259		
	Became negative ...	347	198	54	89	45	327		
CONDITION ON DISCHARGE	Became positive ...			161	175	5	12	5	43
	Successful A.P. continued ... ..			905	405	86	153	91	672
	A.P. failed ... ..			176	53	17	—	4	142
	Condition improved... ..			1,073	500	141	153	134	775
	Condition worse ... ..			38	87	11	87	45	143
	Condition stationary ... ..			334	252	98	100	81	321
	Died ... ..			143	82	59	19	5	44
	Ability to Work	Working } Fully	22	21	36	39	15	86	
		Working } Partially	891	243	58	128	86	532	
		Incapable ... ..	532	575	156	173	159	621	
Average duration of stay in days ... ..			149	182	127	101	124	105	
Patients stayed 6 months or more ... ..			615	173	80	58	69	357	
Patients stayed less than 6 months ... ..			973	748	229	301	196	926	



TABLE No. 63.—NUMBER OF T.B. POSITIVE CASES NOTIFIED BY CHEST DISEASES DISPENSARIES DURING THE YEAR 1948 ACCORDING TO RESIDENCE

Dispensaries	Cairo	Alexandria	Damietta	Port-Said	Canal, Suez and Ismailia	Behera	Gharbia	Menoufia	Dakahlia	Sharkia	Kalutbia	Giza	Beni-Suef	Fayoum	Minia	Assiut	Gerga	Qena	Aswan	Oases	TOTAL
Boulaq ...	1,177	4	3	—	9	—	8	—	3	—	69	—	6	—	—	5	6	3	2	—	1,295
Mobtadayan ...	451	18	—	—	24	8	20	19	9	13	89	356	—	—	—	3	—	1	—	—	1,011
Khalifa ...	672	—	—	—	9	—	6	29	2	4	44	29	19	3	13	—	—	—	—	—	830
Damanhour ...	—	5	—	—	—	298	75	—	—	—	—	—	—	—	—	—	—	—	—	—	378
Alexandria ...	—	578	—	—	—	90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	668
Tanta ...	—	—	—	—	—	4	231	15	19	—	—	—	—	—	—	—	—	—	—	—	269
Mansoura ...	1	—	1	—	—	—	73	2	282	6	—	—	—	—	—	—	—	—	—	—	365
Shebin el Kom ...	—	—	—	—	—	—	—	200	—	1	36	—	—	—	—	—	—	—	—	—	237
Mehalla el Kobra... ..	—	—	—	—	—	2	352	2	22	1	—	—	—	—	—	—	—	—	—	—	379
Zagazig ...	—	—	—	—	—	14	1	1	34	276	11	—	—	—	—	—	—	—	—	—	337
Damietta ...	—	—	128	—	—	—	97	—	329	—	—	—	—	—	—	—	—	—	—	—	554
Port Said ...	—	—	—	340	27	—	1	—	1	2	—	—	—	—	—	—	—	—	—	—	371
Sherbin ...	—	—	—	—	—	—	158	—	122	—	—	—	—	—	—	—	—	—	—	—	280
Zifta ...	—	—	—	—	—	—	160	—	64	—	—	—	—	—	—	—	—	—	—	—	224
Fayoum ...	—	—	—	—	—	—	—	—	—	—	—	—	96	264	—	—	—	—	—	—	363
Minia ...	—	—	—	—	—	—	—	—	—	—	—	—	2	—	267	36	—	—	—	—	305
Assiut ...	—	—	—	—	—	—	—	—	—	—	—	—	5	—	1	176	7	1	—	—	190
Souhag ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	98	—	—	—	98
Qena ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	156	—	—	156
Aswan ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	86	—	86
<b>TOTAL ...</b>	<b>2,301</b>	<b>605</b>	<b>132</b>	<b>340</b>	<b>69</b>	<b>416</b>	<b>1,182</b>	<b>268</b>	<b>887</b>	<b>303</b>	<b>249</b>	<b>385</b>	<b>128</b>	<b>267</b>	<b>281</b>	<b>220</b>	<b>111</b>	<b>161</b>	<b>88</b>	<b>—</b>	<b>8,393</b>



**TABLE NO. 64. — CASES REPORTED DEAD TO DISPENSARIES  
DURING THE YEAR 1948 ACCORDING TO AGE.**

Dispensaries	1-5 Years	5-15 Years	15-25 Years	25-35 Years	35-45 Years	Over 45 Years	TOTAL
Boulaq ... ..	23	30	50	79	43	20	<b>245</b>
Mobtadayan ... ..	12	20	134	72	40	15	<b>293</b>
Khalifa ... ..	0	4	62	74	41	37	<b>218</b>
Damanhour ... ..	0	0	6	13	14	11	<b>44</b>
Alexandria ... ..	5	1	5	6	2	3	<b>22</b>
Tanta ... ..	7	12	18	27	24	21	<b>109</b>
Mansoura ... ..	3	13	18	25	16	4	<b>79</b>
Shebin el Kom ... ..	0	0	19	17	7	0	<b>43</b>
Mehalla el Kobra ... ..	2	1	16	22	6	10	<b>57</b>
Zagazig ... ..	0	1	14	11	16	2	<b>44</b>
Damietta ... ..	3	18	23	45	39	31	<b>159</b>
Port-Saïd ... ..	16	3	27	25	8	9	<b>88</b>
Sherbin ... ..	0	2	28	19	14	1	<b>64</b>
Zifta... ..	0	4	8	12	0	3	<b>27</b>
Fayoum ... ..	0	4	29	20	17	6	<b>81</b>
Minia ... ..	0	1	13	13	13	4	<b>44</b>
Assint ... ..	0	1	10	14	6	11	<b>42</b>
Souhag ... ..	0	3	23	12	14	3	<b>55</b>
Qena ... ..	0	1	5	7	3	5	<b>21</b>
Aswan ... ..	0	0	5	4	2	1	<b>12</b>
<b>TOTAL ... ..</b>	<b>71</b>	<b>119</b>	<b>513</b>	<b>522</b>	<b>325</b>	<b>197</b>	<b>1,747</b>

TABLE No. 65.—PROGRESS OF CHEST DISEASES UNITS SINCE 1929

Year	Chest Diseases Dispensaries			Sanatoria	Bone T.B. Sanatoria	Preventoria	T.B. Conv. Colonies
	Dispensaries	Branches	In-Patient Sections				
1929 ... ..	2	—	—	—	—	—	—
1930 ... ..	3	—	—	—	—	—	—
1931 ... ..	3	—	—	—	—	—	—
1932 ... ..	3	—	—	—	—	—	—
1933 ... ..	4	—	—	—	—	—	—
1934 ... ..	4	—	—	1 <sup>(1)</sup>	—	—	—
1935 ... ..	5	—	—	1	—	—	—
1936 ... ..	6	—	—	—	1 <sup>(2)</sup>	—	—
1937 ... ..	8	—	—	1	1	—	—
1938 ... ..	12	—	2	2	1	1	—
1939 ... ..	13	—	2	2	1	1	—
1940 ... ..	14	—	4	2	1	4	—
1941 ... ..	14	1	4	2	1	4	—
1942 ... ..	15	3	6	2	2	4	—
1943 ... ..	15	3	6	2	2	4	1
1944 ... ..	16	4	8	3	2	4	1
1945 ... ..	17	4	10	3	2	4	1
1946 ... ..	19	12	12	4	2	4	1
1947 ... ..	19	14	12	5	2	4	1
1948 ... ..	21	15	13	5	3	4	1

N.B.—<sup>(1)</sup> Fouad Sanatorium, Almaza, has been attached to the Section since September 1934.

<sup>(2)</sup> Maritime Sanatorium, Alexandria, has been attached to the Section since September 1936.

TABLE No. 66.—BEDS AVAILABLE IN THE IN-PATIENT SECTIONS OF UNITS  
AT THE END OF THE YEAR 1948

Name of UNIT	1st. Class		2nd. Class		3rd. Class Paying		3rd. Class Gratis			TOTAL
	F.	M.	F.	M.	F.	M.	F.	M.	Children	
Fouad Sanat. Almaza ...	—	12	—	72	22	(1) 132	—	(2) 584	—	800
Abbassia Chest Dis-Hosp.	—	—	24	—	44	—	(3) 358	—	64	490
Giza Sanatorium ...	—	—	—	—	—	—	—	155	—	155
Alexandria Sanatorium ...	—	—	—	—	—	7	30	79	10	126
Mahalla El Kobra Sanat.	—	—	2	4	3	6	52	88	—	155
Maritime Sanat. Port-Said	(Pulmonary T.B.)			—	12	12	48	48	8	128
Damanshour Dispensary ...	—	—	—	—	—	—	—	20	—	20
Tanta „ ...	—	—	—	—	—	—	—	18	—	18
Mansoura „ ...	—	—	—	—	—	—	10	15	—	25
Zagazig „ ...	—	—	—	—	—	—	—	20	—	20
Damietta „ ...	—	—	—	—	—	—	23	42	—	65
Sherbin „ ...	—	—	—	—	—	—	—	30	—	30
Zifta „ ...	—	—	—	—	—	—	—	22	—	22
Fayoum „ ...	—	—	—	—	—	—	—	30	—	30
Minia „ ...	—	—	—	—	—	—	6	14	—	20
Assiut „ ...	—	—	—	—	—	—	15	35	—	50
Souhag „ ...	—	—	—	—	—	—	3	17	—	20
Aswan „ ...	—	—	—	—	—	—	7	15	—	22
Maritime San. Alex. ...	—	—	—	—	—	—	25	24	51	100
Bone T.B. Hospital	—	—	1	1	6	4	30	53	40	135
At Helwan	—	—	—	—	—	—	—	—	90	90
Helwan Preventorium ...	—	—	—	—	—	—	—	—	50	50
Marg „ ...	—	—	—	—	—	—	—	—	54	54
Alexandria „ ...	—	—	—	—	—	—	—	—	50	50
Assiut „ ...	—	—	—	—	—	—	—	—	—	—
Convalescents Colony	No. of Residents in the Colony						79 families			79
At Marg	—	—	—	—	—	—	—	—	—	—
TOTAL ...	—	12	27	77	65	161	607	1,388	417	2,754

N. B. (1) This number includes 30 beds for students  
and 32 „ „ E. S. R.  
(2) „ „ „ 96 „ „ surgery (males)  
(3) „ „ „ 39 „ „ „ (Females)



TABLE No. 67.—MONTHLY ADMISSIONS TO MARG T.B. CONVALESCENTS COLONY DURING THE YEAR 1948

Month	No. of new Convalescents	Ages					Industries						Convalescents still under treatment	Relationship to Contacts							Occasional Diseases	Discharged		Referred to Sanatorium		REMARKS
		Below 20 Years	20-29 Years	30-39 Years	40-49 Years	Above 50 Years	Carpenter	Tailor	Tin-smith	Shoe-Maker	Peasant	Other Industries		Father	Mother	Wife	Sons	Brothers	Sisters	Other Relatives		Convales.	Contacts	Convales.	Contacts	
January ... ..	1	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
February ... ..	2	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—
March ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
April .. ...	1	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
May ... ..	5	—	1	4	—	—	1	1	1	—	1	—	—	—	—	—	—	2	—	—	—	2	4	—	—	—
June ... ..	3	—	1	2	—	—	—	—	2	—	1	—	—	—	—	—	—	—	—	—	—	3	2	—	—	—
July ... ..	1	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	2	—	—	2	—	—	—	—	—
August ... ..	2	—	1	1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
September ... ..	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
October ... ..	1	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
November ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
December ... ..	1	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	17	1	7	9	—	—	3	3	2	6	—	3	2	2	4	9	10	2	6	—	—	4	7	7	3	1

No. of Convales. on 1st. Jan. 1948 ... .. 69  
 " " admitted during the year 17  
 " " " " on Dec. 31, 1948. 79,



TABLE NO. 68.— ANNUAL RETURN OF THE WORK OF

		NEW CHILDREN																		
Name of the Preventorium		No. of new children	AGES																	
			less than 12 year		1-2 years		2-3 years		3-4 years		4-5 years		5-6 years		6-7 years		7-8 years		8-9 years	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Helwan ... ..		98	14	16	—	2	2	4	4	8	4	5	5	4	6	3	6	2	—	2
Marg ... ..		21	—	—	—	—	—	—	—	—	—	2	6	4	2	4	—	—	—	
Alexandria ... ..		38	2	4	1	1	—	—	1	2	2	2	1	3	2	—	2	3	2	1
Assiut ... ..		15	1	3	—	1	1	2	—	—	1	—	2	1	1	—	—	1	1	—
TOTAL ... ..		172	17	23	1	4	3	6	5	10	7	7	10	14	13	5	12	6	3	3

	Helwan	Marg	Alexandria	Assiut
<i>N.B.—</i>				
Number of Children on January 1, 1948 ... ..	67	32	38	22
„ „ admitted during the year ... ..	98	21	38	15
„ „ discharged „ „ ... ..	74	14	32	16
„ „ on December 31, 1948	91	39	44	21

TABLE NO. 69.— ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME SANATORIUM AND

Unit	OUT-PATIENT SECTION																				
	New Patients											Old Patients									
	No. of new patients	Ages						Cases				No. of old patients	Cases				Treatment		Minor Operations	X-Ray	Dressings
		Under 5 years		5-10 years		Obove 10years		Rickets	T.B. Spine	T. B. Joints	Other diseases		Rickets	T.B. Spine	T. B. joints	Other diseases	By Electricity	By Ultra violet			
M.	F.	M.	F.	M.	F.	M.	F.					M.							F.	M.	F.
Alexandria	235	23	27	34	18	77	56	10	54	66	105	268	10	5	35	218	—	101	98	142	167
Helwan ...	619	24	24	34	52	211	274	2	267	226	124	1051	14	509	494	34	—	—	—	—	38
TOTAL ...	854	47	51	68	70	288	330	12	321	292	229	1319	24	514	529	252	—	101	98	142	205

<i>N.B.—</i>	Alexandria San	Helwan Hosp
Number of patients on 1st January 1948 ... ..	72	126
„ „ „ admitted during the year ... ..	106	213
„ „ „ discharged „ „ ... ..	98	214
„ „ „ on Dec. 31, 1948 ... ..	80	125



PREVENTORIA DURING THE YEAR 1948.

0 years				more than 10 Years				Details regarding relatives					Mantoux Test in Child			Diseases attacked children during their residence						Children Dis- charged		Remarks
				Relations					Condition															
F.	M.	F.		Father	Mother	Brother	Sister	Other relatives	Died	Alive	Sputum pos.	X-Ray pos.	Positive	Negative	Not Done	Skin	Stomach	Intestinal	Ophthalmic	Chest	Other diseases	Discharged	Died	
3	3	2	3	39	33	1	4	—	1	66	9	68	26	10	62	17	5	52	—	3	34	65	9	
2	—	—	1	16	1	4	—	—	1	16	—	21	5	2	14	8	7	—	—	—	13	14	—	
2	—	4	3	15	17	6	—	—	—	38	38	—	38	—	—	—	—	—	—	—	—	28	4	
—	—	—	—	5	10	—	—	—	—	15	15	—	1	1	13	20	1	—	41	—	35	16	—	
7	3	6	7	75	61	11	4	—	2	135	62	89	70	13	89	45	13	52	41	3	82	123	13	

PRINCESS KHADIGA ABBAS HALIM HOSPITAL FOR BONE DISEASES AT HELWAN DURING THE YEAR 1948

IN-PATIENT SECTION

No. of new patients Admitted	New Patients											Discharged										Major Operations	Minor Operations	Plaster	X-Ray
	Ages						T.B. Spine	T.B. Knee	T.B. Hip.	T.B. joints	Other diseases	No. of pat. Discharged	Result					Treat. By Ultra Violet							
	Under 5 years		5-10 years		Obove 10 years								Died	Cured	Stationary	Improved	Discharged in plaster								
	M.	F.	M.	F.	M.	F.																			
106	13	11	15	7	37	23	57	14	22	11	2	98	2	18	19	23	36	6	27	—	123	232			
213	4	4	16	27	51	111	66	15	14	60	58	214	6	130	43	29	6	30	42	—	171	758			
319	17	15	31	34	88	134	123	29	36	71	60	312	8	148	62	52	42	36	69	—	294	990			

TABLE No. 70.—ANNUAL RETURN OF CHEST

Dispensaries	New Cases seeking Treatment (Dispensary)	(New T.B. Cases in the Dispensary) or (New Patients admitted)																				Professionals		
		T.B. Cases			Other Chest Diseases	Age Groups																		
		Total	Sputum+	X-Ray+		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years		Vendors	Officials	Workmen		
						M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				M.	F.
Boulaq ... ..	10,194	1295	827	468	8261	57	42	146	135	276	124	224	87	80	42	52	17	10	3	71	99	580		
Mobtadayan ... ..	11,737	1011	687	324	10726	26	21	108	66	256	106	195	54	76	25	38	13	13	14	59	152	319		
Khalifa ... ..	10,199	830	466	364	9369	16	15	95	60	230	98	117	43	60	25	41	5	11	6	65	70	372		
Damanhour ... ..	6,687	378	344	34	6309	7	5	36	19	100	42	78	33	24	4	18	2	8	2	15	25	70		
Alexandria ... ..	9,382	668	414	254	8714	11	17	82	40	221	68	116	33	47	4	25	1	3	—	29	46	351		
Tanta ... ..	12,618	269	181	88	12349	5	4	18	16	57	27	63	27	25	10	9	3	4	1	12	27	62		
Mansoura ... ..	10,218	365	260	105	9853	5	3	34	25	78	35	88	38	34	5	12	4	4	—	12	26	71		
Shebin El Kom ... ..	8,377	237	124	113	8140	3	5	14	12	59	32	41	30	16	15	6	3	1	—	10	15	48		
Mahalla El Kobra... ..	10,821	379	325	54	10442	5	2	27	12	69	19	96	47	52	26	15	3	5	1	13	16	112		
Zagazig ... ..	14,221	337	280	57	13884	1	1	30	16	94	39	78	21	34	9	10	1	3	—	20	12	100		
Damietta ... ..	11,363	554	318	236	10809	25	13	41	34	126	58	113	54	35	10	20	10	13	2	14	13	131		
Port Said ... ..	5,706	371	275	96	5335	19	14	32	34	83	50	47	24	33	6	18	3	5	3	24	19	136		
Sherbin ... ..	6,832	280	197	83	6552	11	7	17	15	60	19	60	20	45	11	11	1	3	—	19	11	37		
Zifta ... ..	4,296	224	102	122	4072	15	14	15	21	34	19	26	20	15	9	16	10	8	2	10	6	47		
Fayoum ... ..	6,556	360	324	36	6069	—	—	26	20	97	40	75	46	29	17	5	3	2	—	16	24	63		
Minia ... ..	5,412	305	93	212	5107	6	6	18	7	42	20	65	40	40	15	23	7	11	5	18	24	60		
Assiut ... ..	4,810	190	165	25	4620	2	1	13	6	44	40	20	25	16	9	7	4	1	2	2	13	38		
Souhag ... ..	3,909	98	69	29	3743	2	3	6	5	29	10	21	5	6	6	4	1	—	—	2	6	11		
Qena ... ..	3,209	156	99	57	3053	2	1	12	2	37	17	42	15	16	4	6	1	—	1	4	6	22		
Aswan ... ..	1,657	86	56	30	1571	1	1	5	3	30	12	18	2	6	—	6	2	—	—	5	5	13		
TOTAL ...	158204	8393	5606	2787	148978	219	175	775	548	2030	875	1583	664	689	252	342	94	105	42	420	615	2643		

Dispensaries	X-Ray Exam.			Exam. of (Sanat.)				Old Cases (Disp.)					Visits (Disp.)		Discharges					
	Old Patients			Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse
	Pos.	Under Observ														Pos.	Neg.			
		No.	No.																	
Boulaq ... ..	192	—	—	—	—	—	—	7,456	4,017	974	1,022	1,443	3,324	319	599	253	346	335	95	99
Mobtadayan ... ..	27	—	—	—	—	—	—	13,686	7,449	1,063	1,810	3,364	2,845	407	423	210	213	242	89	56
Khalifa ... ..	—	140	—	—	—	—	—	8,155	4,720	1,583	1,414	438	1,740	356	461	231	230	165	137	119
Damanhour ... ..	55	4	—	—	—	—	—	6,346	2,934	171	120	3,121	4,696	508	118	96	22	82	24	11
Alexandria ... ..	39	—	—	—	—	—	—	15,014	11,273	2,189	512	1,040	1,817	365	245	114	131	145	79	20
Tanta ... ..	31	3	—	—	—	—	—	11,207	3,811	697	423	6,276	1,071	267	109	70	39	59	30	13
Mansoura ... ..	130	7	—	—	—	—	—	4,803	4,609	105	73	16	1,626	433	162	90	72	77	38	39
Shebin El Kom ... ..	28	—	—	—	—	—	—	4,795	2,840	608	57	1,290	779	358	94	35	60	38	34	16
Mehalla El Kobra... ..	60	38	4	—	—	—	—	6,804	3,915	366	338	2,185	2,608	766	111	65	46	47	36	23
Zagazig ... ..	96	16	—	—	—	—	—	16,229	8,502	1,689	969	5,069	1,379	379	96	53	43	50	31	13
Damietta ... ..	611	2	—	—	—	—	—	8,980	5,726	85	126	3,043	2,120	684	501	266	235	478	15	7
Port Said ... ..	189	193	—	—	—	—	—	3,527	3,008	222	279	18	1,853	760	54	39	15	30	18	1
Sherbin ... ..	126	—	—	—	—	—	—	2,382	854	130	133	1,265	961	336	125	80	45	74	41	9
Zifta ... ..	27	9	—	—	—	—	—	759	261	—	42	456	53	—	25	15	10	12	3	9
Fayoum ... ..	102	10	2	—	—	—	—	5,240	1,683	425	54	3,078	2,349	755	98	67	31	61	23	14
Minia ... ..	133	19	—	—	—	—	—	11,079	3,296	1,353	578	5,852	1,677	412	76	45	31	47	14	12
Assiut ... ..	95	42	3	—	—	—	—	3,310	1,556	518	413	823	1,329	600	108	64	44	67	21	15
Souhag ... ..	—	—	—	—	—	—	—	3,415	909	218	62	2,226	—	—	72	43	29	42	15	10
Qena ... ..	34	2	—	—	—	—	—	3,033	854	99	40	2,040	448	343	20	15	5	6	10	2
Aswan ... ..	—	—	—	—	—	—	—	1,861	438	155	68	1,200	1,133	381	61	27	34	27	19	11
TOTAL ... ..	1975	485	9	—	—	—	—	138081	72655	12650	8533	44243	33808	8429	3558	1878	1680	2084	772	499



DISEASES DISPENSARIES DURING THE YEAR 1948

to Sanatorium)									New Contacts (Disp.)			Cases under Observation (Disp.)	Hamoptysis	Sputum Examination				X-Ray Examination			
sions			(Disp.)		Classes (Sanat.)				Children	Adults	T.B. Contacts			Total of Sputum	Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases	
Peasants	Students	No cupa	Cases recorded for San.	Cases admitted to San.	1st	2nd	3rd Paying	3rd Gratis							No.	Pos.	No.	Pos.		No.	Pos.
98	54	393	856	611	—	—	—	—	406	562	58	325	34	2,424	1,991	827	433	74	1,013	821	374
130	26	325	644	377	—	—	—	—	436	502	21	197	32	1,934	1,580	687	354	49	2,044	2,017	477
31	32	260	705	413	—	—	—	—	352	330	—	—	—	3,140	2,563	466	577	46	512	372	297
143	4	121	178	65	—	—	—	65	111	102	2	90	6	811	527	344	284	201	527	468	379
35	7	200	386	291	—	—	—	—	230	256	3	54	—	2,096	1,259	414	837	197	311	272	152
66	5	97	146	107	—	—	—	61	113	113	4	72	10	528	426	181	102	44	357	323	203
117	17	122	313	238	—	—	—	58	71	207	10	10	15	1,038	592	260	466	259	228	91	36
59	2	103	147	97	—	—	—	—	77	100	12	65	—	389	249	124	140	23	101	73	62
110	4	124	142	133	—	—	—	—	189	221	25	73	—	710	528	325	182	73	388	290	234
110	4	91	128	92	—	—	—	—	153	281	8	6	17	1,005	698	280	307	90	195	83	49
152	8	236	617	346	—	—	—	351	183	367	15	419	—	1,142	862	318	280	145	882	269	146
5	9	178	197	135	—	—	—	140	261	407	27	93	51	809	425	275	384	315	652	270	245
120	3	90	239	146	—	—	—	104	44	131	21	51	17	702	435	197	267	134	190	64	61
43	6	112	105	38	—	—	—	44	114	130	1	17	—	387	304	102	83	28	109	73	30
130	9	118	99	99	—	—	—	99	104	178	10	127	45	975	562	324	413	179	166	54	44
83	5	115	136	64	—	—	—	64	119	144	2	145	1	867	383	93	484	167	469	317	125
94	5	38	160	115	—	—	—	115	62	120	7	—	80	1,158	483	165	675	363	307	170	91
41	1	37	102	73	—	—	—	73	21	18	1	29	—	589	284	69	305	149	—	—	—
82	6	36	69	15	—	—	—	72	15	15	—	5	—	274	211	99	63	30	155	119	99
21	—	42	99	69	—	—	—	69	8	15	—	30	—	246	94	56	152	71	—	—	—
1670	207	2838	5,468	3,526	—	—	—	1364	3129	4199	227	1,808	308	21,224	14,436	5,606	6,788	2,637	8,606	6,146	3,104

Patients				Treatment					Operations												No. of Deaths
Died	Ability to Work			Tuberculin	Gold	Other Injections	Exercise Treatment	General Treatment	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage or Oleothorax	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Refused admission to Sanatorium	
	Complete	Partial	Unable							Induction	Refills			Induction	Refills						
70	3	361	165	—	—	—	—	—	—	—	1,598	—	—	—	—	—	—	—	—	—	245
36	4	237	146	—	—	—	—	—	27	1	2,886	—	—	—	—	—	—	—	—	—	293
40	88	182	151	—	—	—	—	—	5	—	2,243	—	—	—	—	—	—	—	—	—	218
1	—	44	73	—	—	—	46	118	—	57	2,534	—	—	—	—	—	—	—	—	—	44
1	7	96	14	—	—	—	—	—	1	1	2,822	—	—	—	—	—	—	—	—	82	22
7	8	31	63	—	—	77	—	64	11	25	1,523	—	—	—	—	—	—	—	8	109	
8	11	61	2	—	—	427	—	—	36	19	1,643	—	—	—	—	—	—	—	—	—	79
6	—	3	47	—	—	19	—	—	—	1	521	—	—	—	—	—	—	—	—	—	43
5	7	65	34	—	—	212	—	—	4	—	696	—	—	—	—	—	—	—	—	—	57
2	—	42	52	—	—	—	—	—	64	32	2,245	—	—	—	—	—	—	—	1	—	44
1	1	171	328	—	—	738	136	346	57	322	6,358	—	—	—	—	—	—	—	—	—	159
5	—	33	16	34	—	112	36	67	33	57	1,793	—	—	—	—	86	—	—	—	52	88
1	4	37	83	1	—	213	—	—	57	41	968	—	—	—	—	—	—	—	2	38	64
1	—	15	9	—	—	13	—	—	15	24	462	—	—	—	—	—	—	—	—	—	27
—	1	57	40	—	42	294	—	—	73	35	1,224	—	—	—	—	—	—	—	—	24	81
3	—	17	56	—	—	—	—	—	27	36	636	—	—	—	—	—	—	—	—	—	44
5	4	60	39	—	—	—	—	—	33	65	1,359	—	—	—	—	—	—	—	—	—	42
5	3	28	36	26	112	1	—	—	20	29	576	—	—	—	—	—	—	—	—	3	55
2	—	6	12	—	—	1	—	—	1	2	228	—	—	—	—	—	—	—	—	—	21
4	3	26	28	—	—	—	—	—	35	32	608	—	—	—	—	—	—	—	—	—	12
203	146	1,608	1601	61	154	2107	218	595	499	779	32,973	—	5	—	—	86	—	—	2	208	174



TABLE No. 71—ANNUAL RETURN OF SANATORIA AND

		(New T.B. Cases in the Dispensary) or (New Patients admitted)																		
Dispensary	Branches	New Cases Seeking Treatment (Dispensary)	T.B. Cases			Other Chest Diseases	Age Groups													
			Total	Sputum +	X-Ray +		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years	
							M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Damanhour ...	Shobrakhit... ..	916	13	10	3	903	—	—	—	—	5	1	4	2	—	—	—	1	—	—
Tanta ... ..	Kafr el Zayat ...	159	2	2	—	157	—	—	—	—	—	—	1	—	—	—	1	—	—	
Mansoura ... ..	Simbellawein ...	1465	6	3	3	1459	—	—	—	1	1	2	1	1	—	—	—	—	—	
Shebin el Kom {	Menouf ... ..	1052	21	10	11	1031	—	—	2	1	6	3	6	1	1	1	—	—	—	
	Benha ... ..	1581	26	15	11	1555	—	—	3	2	10	3	1	3	2	2	—	—	—	
Mehalla el Kobra	Kafr El Sheikh...	1860	45	87	8	1815	1	—	4	2	7	3	8	9	4	3	2	1	1	
Damietta ... ..	Faraskour ... ..	2368	—	—	—	2368	—	—	—	—	—	—	—	—	—	—	—	—	—	
Port-Saïd ... ..	Ismailia ... ..	265	12	11	1	253	—	—	1	3	1	1	5	—	1	—	—	—	—	
Sherbin ... ..	Dikernis ... ..	2649	28	21	7	2623	—	1	—	5	4	2	8	2	3	1	2	—	—	
Fayoum ... ..	Etsa ... ..	416	24	24	—	390	—	—	4	2	7	1	7	1	2	—	—	—	—	
Minia ... ..	Samallout ... ..	971	33	3	30	938	—	1	1	1	4	—	7	8	4	3	3	—	1	
Souhag ... ..	Akhmim ... ..	401	8	5	3	390	—	—	1	—	5	—	1	—	—	—	—	1	—	
	Gerga ... ..	628	11	9	2	610	—	—	1	2	2	1	3	1	1	—	—	—	—	
Qena ... ..	Luxor ... ..	594	38	26	12	556	—	—	2	1	5	7	11	4	4	1	2	—	—	
	Nag Hamadi ...	789	—	—	—	789	—	—	—	—	—	—	—	—	—	—	—	—	—	
Fouad Sanat Almaza ... ..		1735	1735	1100	685	—	—	—	262	—	856	—	400	—	157	—	49	—	11	
Abbassia Hospital ... ..		971	947	730	217	24	56	62	5	280	—	355	—	141	—	50	—	17	—	
Giza Sanat. ... ..		379	364	287	77	15	1	—	36	—	184	—	98	—	48	—	10	—	2	
Alexandria Sanat ... ..		387	387	238	149	—	5	5	40	34	141	42	64	28	13	8	5	1	1	
Mahalla el Kobra ... ..		421	420	361	59	1	2	7	32	38	145	45	68	32	31	9	8	1	3	
TOTAL ... ..		3893	3853	2716	1137	40	64	74	375	352	1326	442	630	201	249	67	72	19	17	

Dispensary	Branches				Exam of (Sanat)				Old Cases (Disp.)					Visits Disp.		Discharge						
		Old Patients			Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse	
		Pos.	Under Observ.														Pos.	Neg.				
			No.	No.																		Pos.
Damanhour ...	Shobrakhit... ..	—	—	—	—	—	—	—	714	47	2	—	665	—	—	—	—	—	—	—	—	—
Tanta ... ..	Kafr el Zait ... ..	—	—	—	—	—	—	—	105	5	5	—	95	—	—	—	—	—	—	—	—	—
Mansoura ... ..	Simbellawein ... ..	—	—	—	—	—	—	—	273	271	—	1	1	62	26	—	—	—	—	—	—	—
Shebin el Kom...	Menouf ... ..	—	—	—	—	—	—	—	141	125	2	1	13	64	60	4	1	3	3	1	—	—
	Benha ... ..	—	—	—	—	—	—	—	204	202	1	—	1	34	30	11	4	1	1	7	—	—
Mehalla el Kobra	Kafr El Sheikh...	—	—	—	—	—	—	—	829	290	25	31	483	168	168	—	—	—	—	—	—	—
Damietta ... ..	Faraskour ... ..	—	—	—	—	—	—	—	—	—	—	—	—	373	183	—	—	—	—	—	—	—
Port-Saïd ... ..	Ismailia ... ..	—	—	—	—	—	—	—	75	41	16	—	18	—	—	—	—	—	—	—	—	—
Sherbin ... ..	Dikernes ... ..	—	—	—	—	—	—	—	574	229	72	53	220	96	95	3	2	1	1	2	—	—
Fayoum ... ..	Etsa ... ..	6	—	—	—	—	—	—	300	60	15	—	225	392	392	—	—	—	—	—	—	—
Minia ... ..	Samallout ... ..	—	—	—	—	—	—	—	1446	162	40	28	1216	161	84	—	—	—	—	—	—	—
Souhag ... ..	Akhmim ... ..	—	—	—	—	—	—	—	284	20	3	—	261	4	4	—	—	—	—	—	—	—
	Gerga ... ..	—	—	—	—	—	—	—	319	30	6	—	283	24	23	—	—	—	—	—	—	—
Qena ... ..	Luxor ... ..	—	—	—	—	—	—	—	889	308	12	9	560	27	42	4	4	—	1	1	—	—
	Nag Hammadi...	2	—	—	—	—	—	—	482	53	5	1	423	16	19	5	4	1	1	3	—	—
Fouad Sanat Almaza ... ..		1310	—	—	907	306	514	293	—	—	—	—	—	—	—	1588	999	589	1073	294	70	—
Abbassia Hospital ... ..		1203	31	—	706	503	503	503	—	—	—	—	—	—	—	921	656	265	500	252	87	—
Giza Sanat. ... ..		274	34	—	258	286	286	286	—	—	—	—	—	—	—	309	189	120	141	98	11	—
Alexandria ... ..		185	36	26	—	—	—	—	—	—	—	—	—	—	—	359	172	187	153	100	87	—
Mehalla el Kobra ... ..		420	7	—	327	187	270	283	—	—	—	—	—	—	—	265	172	93	140	86	34	—
TOTAL... ..		3392	108	26	2198	1282	1513	1365	—	—	—	—	—	—	—	3442	2188	1254	2007	830	297	—

Statment	Almaza Sanat.	Abbassia Hosp.	Giza Sanat.	Alexandria Sanat.	Mehalla el Kobra Sanat.	Damanhour	Tanta
No. of Pts. on 1st. Jan. 1948 ... ..	544	391	150	103	66	20	13
No. of Pts. admitted during the year ...	1735	971	395	387	355	63	61
No. of Pts. discharged during the year ...	1588	921	392	359	265	83	57
No. of patients on Dec. 31, 1948 ... ..	691	446	153	131	156	—	17
Average duration of stay ... ..	149	182	127	101	124	77	81



[illegible]

nsoura	Zagazig	Damietta	Port-Said	Sherbin	Zifta	Fayoum	Minia	Assiut	Sohag	Aswan
20	13	52	13	19	—	29	16	42	19	19
58	51	351	121	104	38	99	64	115	73	69
54	47	338	54	97	21	98	63	108	72	66
24	17	65	80	26	17	30	17	49	20	22
159	125	65	48	104	44	115	114	155	99	36



## Chapter IX.—Venereal and Skin Diseases

The total number of new patients attending venereal and skin diseases units during the year was 267,460 (106,391 males and 161,069 females) as against 286,403 new patients in the previous year.

The number of attendances of patients was 466,818 as against 478,319 in 1947.

### *Gonorrhoea :*

Among new patients, a total of 19,070 (5,991 males and 13,079 females) were found suffering from gonorrhoea as against a total of 18,060 patients in the previous year. A total of 7,525 (3,468 males and 4,057 females) were cured this year.

### *Syphilis :*

A total of 10,559 new patients (5,163 males and 5,396 females) were found suffering from syphilis as against 10,635 in the previous year. Of the former figure, 320 males and 396 females were cured during the year.

### *Skin Diseases :*

A total of 236,658 new patients (94,576 males and 142,082 females) suffered from skin diseases as against 256,777 patients in the previous year., 55,494 males and 81,067 females were cured this year.

### *Other Venereal Diseases :*

1, 173 new patients (661 males and 512 females) suffered from other venereal diseases, as against a total of 931 patients in the previous year.

The following tables give details of the above figures :

TABLE NO. 72-CASES REMAINING FROM 1947 (UNDER TREATMENT) IN VENEREAL DISEASES HOSPITALS

Hospital	Syphilis	Gonorrhoea	Syph. & Gon	Syph, Gon & Chaneroid	Syph, Gon & Skin Dis	Syph. & Chan.	Syph. & Skin. Dis	Gon. & Chan.	Gon. & Skin. Dis	Gon. Chan. & Skin Dis	TOTAL
Hod el Marsoud	2	31	52	3	5	1	2	2	3	—	101
Gabbari ... ..	12	17	10	2	—	5	1	17	—	—	64
TOTAL ...	14	48	62	5	5	6	3	19	3	—	165

TABLE NO. 73.— NEW CASES DURING THE YEAR 1947

Hospital	Syphilis	Gonorrhoea	Syph. & Gon	Syph, Gon & Chaneroid	Shph Gon & Skin Dis	Syph. & Chan	Syph. & Skin Dis	Gon. & Chan.	Gon. & Skin. Dis	Gon., Chan. & Skin Dis	TOTAL
Hod el Marsoud	15	515	552	26	19	5	4	33	23	4	1196
Gabbari ... ..	175	364	248	368	—	182	33	72	—	—	1442
TOTAL ...	190	879	800	394	19	187	37	105	23	4	2638





TABLE No. 74.—NEW CASES AND VISITS

Locality of Clinic	NEW CASES									
	Syphilis		Gonorrhoea		Skin Diseases		Other Dis.		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayed Zeinab ... ..	376	221	618	603	2,007	4,422	—	17	3,001	5,2
Shubra ... ..	211	186	761	614	8,757	10,181	—	—	9,729	10,8
Gamalia ... ..	491	205	1,380	2,731	1,824	2,610	96	9	3,791	5,5
Abbassia ... ..	116	86	227	422	2,154	2,562	3	—	2,500	3,0
Old Cairo ... ..	45	15	97	519	749	795	—	13	891	1,3
Khalifa ... ..	86	63	103	516	1,054	5,400	—	—	1,243	5,9
Heliopolis ... ..	122	41	74	381	905	2,481	—	—	1,161	2,9
Port-Said ... ..	90	86	173	575	1,817	2,492	12	2	2,092	3,1
Port Said Health Centre	55	101	66	298	1,603	2,042	—	—	1,724	2,4
Ismailia ... ..	92	208	109	488	1,710	2,855	—	—	1,911	3,5
Suez ... ..	170	74	439	2,027	1,601	3,432	202	2	2,412	5,5
Damietta ... ..	71	164	19	70	2,217	6,972	—	—	2,302	7,2
Benha ... ..	58	92	33	102	1,952	2,237	163	263	2,206	2,0
Shebin-el-Kom ... ..	112	79	108	12	3,380	9,014	—	—	5,600	9,2
Menouf ... ..	47	41	14	127	3,467	3,726	—	—	3,528	3,8
Tanta ... ..	250	243	197	558	6,434	5,467	3	2	6,884	6,2
Mehalla-el-Kobra ... ..	94	91	72	102	2,524	1,980	2	—	2,692	2,1
Kafr El Zayat ... ..	62	46	47	115	2,673	3,284	4	—	2,786	3,4
Zagazig ... ..	115	119	70	10	4,639	4,011	22	2	4,846	4,1
Facus ... ..	119	294	11	85	2,347	2,650	—	—	2,477	3,0
Mansoura ... ..	184	151	265	1,041	3,523	4,375	97	3	4,069	5,5
Mit-Ghamr ... ..	83	82	11	3	4,533	5,642	—	—	4,627	5,7
Damanhour ... ..	120	103	140	226	5,531	8,640	9	—	5,800	8,9
Kafr-el-Dawar ... ..	28	21	21	20	661	1,496	1	1	711	1,5
Giza... ..	99	85	101	177	1,503	1,554	—	—	1,703	1,8
Fayoum ... ..	178	245	171	169	1,509	2,054	—	—	1,858	2,4
Sennuris ... ..	61	91	14	6	1,097	4,263	—	139	1,172	4,4
Beni-Suef ... ..	93	80	146	181	4,174	4,633	19	7	4,432	4,5
Minia ... ..	126	121	83	401	1,915	4,009	16	—	2,140	4,5
Samalut ... ..	113	194	5	36	605	966	—	—	723	1,1
Assiut ... ..	282	355	107	30	2,912	3,317	3	—	3,302	3,2
Deirout ... ..	42	55	7	14	2,262	1,944	7	42	2,318	2,0
Gerga ... ..	212	293	34	31	3,363	8,873	—	—	3,609	9,5
Tahta ... ..	161	244	6	22	1,478	3,509	—	—	1,645	3,8
Souhag ... ..	175	160	21	2	1,746	1,698	—	—	1,942	1,8
Qena ... ..	95	105	36	6	1,388	2,471	—	—	1,519	2,2
Nag Hamadi ... ..	78	149	36	32	645	1,213	—	—	759	1,3
Luxor ... ..	147	235	38	47	852	1,379	2	10	1,039	1,0
Aswan ... ..	104	167	133	167	1,010	1,373	—	—	1,247	1,7
<b>TOTAL ... ..</b>	<b>5,163</b>	<b>5,396</b>	<b>5,991</b>	<b>13,079</b>	<b>94,576</b>	<b>142,082</b>	<b>661</b>	<b>512</b>	<b>106,391</b>	<b>161,0</b>

THE SKIN AND VENEREAL DISEASES CLINICS DURING 1948

NUMBER OF VISITS								TOTAL	
Syphilis		Gonorrhoea		Skin Diseases		Other Dis.		M.	F.
M.	F.	M.	F.	M.	F.	M.	F.		
354	7,254	2,301	6,340	2,580	6,368	—	—	11,235	19,962
711	5,133	1,492	3,349	2,016	3,390	—	—	8,219	11,872
162	9,767	2,721	8,985	1,418	2,194	438	105	5,739	21,051
597	3,230	576	3,232	409	1,017	3	—	3,585	7,479
848	794	402	3,221	404	769	—	5	1,654	4,789
433	1,784	165	3,562	474	1,525	—	—	2,072	6,871
298	490	345	2,918	980	1,697	—	—	2,623	5,105
501	5,822	776	2,741	600	1,045	20	1	3,897	9,609
722	2503	210	4,325	264	1,028	1	1	1,197	7,857
570	3,687	283	2,634	1,294	2,048	—	—	3,147	8,369
258	2,842	2,024	6,104	932	2,000	736	9	6,950	10,955
329	7,841	153	798	577	1,633	—	—	4,059	10,272
635	1,205	58	157	164	303	59	504	916	2,169
659	2,562	676	1,328	1,111	3,025	—	—	4,446	6,915
917	2,431	135	2,045	1,973	1,844	—	—	4,025	6,320
558	9,021	660	5,531	1,820	2,507	3	1	10,041	17,060
638	3,437	440	598	82	663	—	—	4,880	4,698
468	1,635	121	964	2,357	2,832	2	4	3,948	5,435
625	909	65	15	952	755	18	2	1,660	1,681
880	5,406	29	688	1,461	2,423	—	—	3,370	8,517
958	5,371	676	2,830	292	518	30	2	4,956	8,721
892	3,237	29	7	1,727	1,565	—	—	3,648	4,809
980	2,296	609	1,308	3,396	3,542	23	14	6,008	7,160
614	774	19	13	117	183	—	—	750	970
563	4,149	319	1,491	804	760	—	—	4,686	6,400
892	8,213	629	1,170	203	295	—	—	4,724	9,678
245	2,083	44	39	1,051	3,054	—	607	2,340	5,783
673	2,269	566	1,113	1,543	2,565	65	24	3,847	5,971
182	4,875	362	511	966	1,514	8	—	5,518	6,909
430	3,266	24	86	399	557	63	105	1,916	4,014
636	10,141	174	192	1,621	1,877	1	2	7,432	12,212
521	3,548	—	—	1,148	1,206	7	352	2,676	5,106
423	4,394	75	333	1,106	2,832	—	—	3,604	7,559
201	4,737	37	734	139	221	—	—	2,377	5,692
704	6,207	39	—	365	460	—	—	5,108	6,667
248	4,909	108	76	838	1,088	8	—	3,202	6,073
106	8,364	264	300	355	711	—	—	3,725	9,375
525	6,958	143	766	260	505	—	8	3,928	8,237
307	5,456	235	1,384	395	620	—	—	2,937	7,460
263	166,000	17,984	171,883	39,413	63,139	1485	1,746	161,045	305,773



TABLE NO. 75. — NEW CASES OF SYPHILIS IN VENEREAL DISEASES CLINICS DURING 1948.

Locality of Clinic	Acute Syphilis						Other Stages.								TOTAL	
	Primary		Secondary		Total.		Tert		Latent		Nervous		Herd.		M.	F.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Sayed Zeinab ...	212	17	87	72	299	89	19	8	48	96	3	—	7	28	376	221
Shubra ...	87	14	60	39	147	53	3	1	43	111	—	—	18	21	211	183
Gamalia ...	27	19	158	79	385	98	25	7	75	81	1	—	5	19	491	205
Abbassia ...	57	13	15	9	72	22	7	6	33	56	—	—	4	2	116	86
Old Cairo ...	21	—	14	4	35	4	1	—	8	9	—	—	1	2	45	15
Khalifa ...	36	10	20	7	56	17	10	5	11	22	2	—	7	24	86	68
Heliopolis ...	54	—	21	5	75	5	18	5	24	26	2	—	3	5	122	41
Port-Saïd ...	4	—	38	14	42	14	13	6	21	54	8	—	6	12	90	86
Port-Saïd Health Centre ...	7	—	12	4	19	4	—	—	31	82	—	—	5	15	55	101
Ismailia ...	9	—	13	12	22	12	11	6	51	167	—	—	8	23	92	208
Suez ...	102	4	42	11	144	15	8	1	16	50	—	2	2	6	170	74
Damietta ...	10	2	4	4	14	6	12	2	39	145	4	—	2	11	71	164
Benha ...	5	—	9	11	14	11	7	2	32	73	1	—	4	6	58	92
Shebin-el-Kom ...	40	2	25	27	65	29	4	2	27	36	—	—	16	12	112	79
Men uf ...	10	1	3	5	13	6	7	10	21	23	3	—	3	2	47	41
Tanta ...	67	24	40	38	107	62	63	23	55	132	—	—	25	26	250	243
Mehalla-el-Kobra ...	1	1	35	15	36	16	15	13	33	56	—	—	10	6	94	91
Kafr el Zayat ...	9	1	5	10	14	11	2	—	42	31	—	—	4	4	62	46
Zagazig ...	32	7	27	36	59	43	17	15	31	54	1	—	7	7	115	119
Facus ...	4	—	14	19	18	19	5	5	60	222	—	1	36	47	119	294
Mansoura ...	30	2	31	14	61	16	17	12	77	99	—	2	29	22	184	151
Mit-Ghamr ...	5	—	9	4	14	4	4	3	56	61	—	—	9	14	83	82
Damanhour ...	40	2	33	26	73	28	8	6	27	54	3	2	9	13	120	103
Kafr El Dawar ...	—	—	11	6	19	6	1	1	8	13	—	—	—	1	28	21
Giza ...	37	7	18	16	55	23	13	7	15	38	2	1	14	16	99	85
Fayoum ...	17	1	59	81	76	82	68	117	8	25	1	—	25	21	178	245
S nnouris ...	11	2	20	29	31	31	12	10	13	44	—	—	5	6	61	91
Beni-Suef ...	41	2	29	32	70	34	9	8	7	30	2	—	5	8	93	80
Minia ...	37	3	25	19	62	22	10	8	37	70	1	—	16	21	126	121
Samalut ...	16	1	32	14	48	15	4	—	46	140	1	—	14	39	113	194
Assiut ...	59	2	34	27	93	29	16	24	118	249	—	1	55	52	282	355
Deirout ...	6	—	8	6	14	6	13	5	7	28	—	—	8	16	42	55
G rga ...	70	34	94	106	164	230	17	6	17	39	1	1	13	17	212	293
Tahta ...	7	—	33	15	40	15	11	15	70	152	1	1	39	61	161	244
Souhag ...	10	—	31	27	41	27	22	16	83	89	—	—	29	28	175	160
Qena ...	7	2	22	15	29	17	17	10	22	58	1	—	26	20	95	105
Nag-Hammadi ...	13	1	20	25	33	26	3	12	38	104	—	—	4	7	78	149
Luxor ...	33	—	17	25	50	25	26	35	47	132	6	1	18	42	147	235
Aswan ...	8	—	7	2	15	2	5	5	41	123	—	—	43	37	104	167
<b>TOTAL ...</b>	<b>1419</b>	<b>174</b>	<b>1175</b>	<b>1000</b>	<b>2624</b>	<b>1174</b>	<b>523</b>	<b>417</b>	<b>1438</b>	<b>3074</b>	<b>44</b>	<b>12</b>	<b>534</b>	<b>719</b>	<b>5163</b>	<b>5336</b>

TABLE No. 76.—NEW CASES OF GONORRHOEA IN VENEREAL DISEASES CLINICS DURING 1948

Locality of Clinic	Gonorrhoea						TOTAL	
	Acute		Chronic		Urethritis	Second Infec.		
	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab ... ..	512	465	99	96	7	42	618	603
Shubra ... ..	631	150	130	464	—	—	761	614
Gamalia ... ..	1,177	920	69	74	134	1,737	1,380	2,731
Abbassia... ..	197	292	14	127	16	3	227	422
Old Cairo ... ..	68	134	29	25	—	360	97	519
Khalifa ... ..	77	143	26	249	—	124	103	516
Heliopolis ... ..	64	8	7	2	3	371	74	381
Port-Saïd ... ..	120	62	8	28	45	485	173	575
Port-Saïd Health Centre	52	99	5	5	9	194	66	298
Ismailia ... ..	95	24	14	1	—	463	109	488
Suez ... ..	340	75	29	10	70	1,942	439	2027
Damietta ... ..	10	14	9	38	—	18	19	70
Benha ... ..	30	13	—	—	3	89	33	102
Shebin-el-Kom ... ..	59	18	37	8	12	96	108	122
Menouf ... ..	14	5	—	—	—	122	14	127
Tanta ... ..	152	22	37	533	8	3	197	558
Mehalla-el-Kobra ... ..	52	36	15	36	5	30	72	102
Kafr El Zayat ... ..	37	28	10	3	—	84	47	115
Zagazig ... ..	68	8	2	—	—	2	70	10
Facus ... ..	8	12	2	72	1	1	11	85
Mansoura ... ..	83	10	2	13	180	1,018	265	1,041
Mit-Ghamr ... ..	6	—	4	—	1	3	11	3
Damanhour ... ..	115	118	24	98	1	10	140	226
Kafr el Dawar ... ..	15	11	6	8	—	1	21	20
Giza ... ..	63	2	23	20	15	155	101	177
Fayoum ... ..	121	131	50	38	—	—	171	169
Sennuris ... ..	13	1	1	5	—	—	14	6
Beni-Suef ... ..	93	92	52	89	1	—	146	181
Minia ... ..	55	—	2	12	26	389	83	401
Samalut ... ..	5	5	—	15	—	16	5	36
Assiut ... ..	99	5	1	—	5	25	105	30
Deirout ... ..	5	—	—	—	2	14	7	14
Gerga ... ..	33	15	1	19	—	—	34	34
Tahta ... ..	4	1	2	8	—	13	6	22
Souhag ... ..	20	—	—	—	1	2	21	2
Qena ... ..	35	5	1	1	—	—	36	6
Nag Hammadi ... ..	27	20	9	10	—	2	36	32
Luxor ... ..	35	22	1	1	2	24	38	47
Aswan ... ..	107	18	6	23	20	126	133	167
TOTAL ... ..	4,697	2,984	727	2,131	567	7,964	5,991	13,079



TABLE NO. 77.—CURED CASES IN VENEREAL DISEASES CLINICS  
DURING 1948

Locality of Clinic	Cured Cases			
	Syphilis		Gonorrhoea	
	M.	F.	M.	F.
Sayed Zeinab ... ..	1	—	277	263
Shubra ... ..	48	29	573	323
Gamalia ... ..	136	83	1,120	1,684
Abbassia ... ..	—	—	193	358
Old Cairo ... ..	—	—	68	115
Khalifa ... ..	—	—	18	55
Heliopolis ... ..	—	—	26	8
Port-Saïd ... ..	3	9	71	75
Port-Saïd Health Centre ...	2	2	8	47
Ismailia ... ..	—	—	39	200
Seuz ... ..	3	—	372	66
Damietta ... ..	21	53	17	42
Benha ... ..	—	—	10	4
Shebin-el-Kom ... ..	—	—	3	1
Menouf ... ..	—	—	1	1
Tanta ... ..	—	—	120	93
Mehalla-el-Kobra ... ..	14	30	27	17
Kafr El Zayat ... ..	—	1	20	55
Zagazig ... ..	5	7	6	3
Facus ... ..	—	—	3	54
Mansoura ... ..	15	27	52	9
Mit-Ghamr ... ..	8	30	—	1
Damanhour ... ..	5	1	9	43
Kafr el Dawar... ..	1	—	8	3
Giza ... ..	4	10	126	200
Fayoum ... ..	9	22	45	70
Sennuris ... ..	2	—	—	—
Beni-Suef ... ..	3	1	105	145
Minia ... ..	9	24	29	2
Samalut ... ..	—	—	2	1
Assiut ... ..	—	—	29	3
Deirout ... ..	—	—	5	—
Gerga ... ..	19	39	11	25
Tahta ... ..	7	17	5	—
Souhag ... ..	4	2	1	—
Qena ... ..	—	—	15	1
Nag-Hammadi ... ..	—	—	—	—
Luxor ... ..	—	1	15	48
Aswan... ..	1	8	39	42
<b>TOTAL ... ..</b>	<b>320</b>	<b>396</b>	<b>3,468</b>	<b>4,057</b>



TABLE No. 78.—NEW AND CURED CASES OF SKIN DISEASES DURING 1948

Locality of Clinic	New Cases		Cured Cases	
	M.	F.	M.	F.
Sayed Zeinab ... ..	2,007	4,422	—	—
Shubra ... ..	8,757	10,181	5,967	7,786
Gamalia ... ..	1,824	2,610	1,301	1,895
Abbassia ... ..	2,154	2,562	1,868	2,182
Old Cairo ... ..	749	795	318	431
Khalifa ... ..	1,054	5,400	549	3,295
Heliopolis ... ..	965	2,481	511	1,310
Port-Said ... ..	1,817	2,492	918	1,386
Port-Said Health Centre ... ..	1,603	2,042	2	6
Ismailia ... ..	1,710	2,855	632	947
Suez ... ..	1,601	3,432	1,188	2,140
Damietta ... ..	2,212	6,972	1,871	6,034
Benha ... ..	1,952	2,237	1,548	1,954
Shebin-el-Kom ... ..	3,380	9,014	2,799	5,191
Menouf ... ..	3,467	3,726	2,749	2,748
Tanta ... ..	6,434	5,467	4,921	4,158
Mehalla-el-Kobra ... ..	2,524	1,980	1,812	1,440
Kafr el Zayat ... ..	2,673	3,284	1,428	1,469
Zagazig ... ..	4,639	4,011	446	391
Facus ... ..	2,347	2,650	1,336	1,694
Mansoura ... ..	3,523	4,375	2,557	3,312
Mit Ghamr ... ..	4,533	5,642	3,826	4,664
Damanhour ... ..	5,531	8,640	3,921	5,985
Kafr El Dawar ... ..	661	1,496	592	910
Gerga ... ..	1,503	1,554	819	795
Fayoum ... ..	1,509	2,054	—	—
Sennuris ... ..	1,097	4,263	205	345
Beni Suef ... ..	4,174	4,633	4,105	4,862
Minia ... ..	1,915	4,009	989	1,373
Samalut ... ..	605	966	148	184
Assiut ... ..	2,912	3,317	752	935
Deirout ... ..	2,262	1,944	120	145
Gerga ... ..	3,363	8,873	2,984	7,315
Tahta ... ..	1,478	3,569	242	160
Suhag ... ..	1,746	1,698	331	404
Qena ... ..	1,388	2,471	1,304	2,393
Nag-Hammadi ... ..	645	1,213	304	590
Luxor ... ..	852	1,379	118	205
Aswan ... ..	1,010	1,373	13	33
<b>TOTAL ... ..</b>	<b>94,576</b>	<b>142,082</b>	<b>55,494</b>	<b>81,067</b>

TABLE No. 79.— NEW CASES OF SCABIES DURING 1948

Locality of Clinic	Scabies		Locality of Clinic	Scabies	
	M.	F.		M.	F.
			<i>Brought Forward</i>	18,116	19,654
Sayeda Zeinab ... ..	667	1,336			
Shubra ... ..	2,008	2,265	Mansoura ... ..	1,136	1,276
Gamalia ... ..	582	543	Mit Ghamr ... ..	1,984	2,295
Abbassia ... ..	838	603	Damanhour ... ..	2,380	2,906
Old Cairo ... ..	190	200	Kafr El Dawar ... ..	284	574
Khalifa ... ..	287	960	Giza ... ..	284	227
Heliopolis ... ..	248	382	Fayoum ... ..	333	436
Port-Saïd ... ..	379	436	Sannuris ... ..	250	598
Port-Saïd Health Centre...	425	478	Beni Suef ... ..	1,288	1,174
Ismailia ... ..	302	245	Minia ... ..	325	443
Suez ... ..	361	520	Samalut ... ..	136	169
Damietta ... ..	562	1,366	Assiut ... ..	965	955
Benha ... ..	721	702	Deirout ... ..	808	506
Shebin El-Kem... ..	1,845	2,657	Gerga ... ..	365	362
Menouf ... ..	927	895	Tahta ... ..	242	160
Tanta ... ..	2,034	1,235	Suhag ... ..	330	189
Mehalla El-Kobra ... ..	706	482	Qena ... ..	219	147
Kafr El-Zayat ... ..	1,166	1,176	Nag Hammadi ... ..	256	374
Zagazig ... ..	2,771	2,278	Luxor ... ..	198	222
Facus ... ..	1,097	895	Aswan... ..	141	124
<b>TOTAL ...</b>	<b>18,116</b>	<b>19,654</b>	<b>TOTAL ...</b>	<b>30,040</b>	<b>32,791</b>

TABLE No. 80—NEW CASES AND VISITS TO SCABIES  
TREATMENT BATH DURING 1948

New Cases		Number of Visits	
M.	F.	M.	F.
4,358	2,601	8,624	4,983



TABLE NO. 81. —HOSPITALS AND CLINICS FROM WHICH PATIENTS  
WERE REFERRED DURING 1948

District	Patients	
	M.	F.
Sayeda Zeinab ... ..	123	84
Shubra ... ..	2,137	2,045
Gamalia ... ..	245	115
Abbassia ... ..	39	50
Old Cairo ... ..	87	41
Khalifa ... ..	1	3
Heliopolis ... ..	2	—
Giza ... ..	105	67
Boulaq Health Centre	251	120
Malek Ho. pital ... ..	46	12
Demerdash Hospital...	6	2
School Hygiene Dept.	68	43
Other Units ... ..	1,248	19
<b>TOTAL ... ..</b>	<b>4,358</b>	<b>2,601</b>

TABLE NO. 82. — NEW CASES AND NUMBER OF VISITS TO MOBILE  
UNITS DURING 1948.

Units	New Cases		Number of Visits	
	M.	F.	M.	F.
Ibrahimia ... ..	693	1,201	181	428
Saft El Khamar ...	381	417	104	128
<b>TOTAL ... ..</b>	<b>1,074</b>	<b>1,618</b>	<b>285</b>	<b>556</b>

FULL DETAILS.

Units	Scabies				Other Skin Diseases	
	New Cases		Cured Cases			
	M.	F.	M.	F.	M.	F.
Ibrahimia ... ..	447	577	350	336	246	624
Saft El Khamar ...	200	201	116	119	181	216
TOTAL ... ..	647	778	466	455	427	840

## Chapter X.—Mental Health

The year under review has been singled out by an event the first of its kind in the history of this Department at least in so far as its Egyptian Officials are concerned. The Government had detailed the Director General of the Mental Health Department to lead the Egyptian delegation to the International Congress for Psychology which was being held in Edinburgh in July and to the International Congress for Mental Health which was being held in London the following August. A detailed report on both congresses was submitted to the Ministry.

The Organisers of the second congress seized the opportunity of the attendance of over 2000 delegates representing 57 states from different parts of the world and proposed — after previous preparation — the foundation of a World Federation for Mental Health. This was actually carried out. The Head of the Egyptian delegation was selected a member of the Executive Board of the Federation, an honour reflecting the high esteem in which the men of this country are held and the distinguished position Egypt occupies among nations.

### *Accommodation :*

Nothing has been done to relieve the crowding of both hospitals. It has not been possible so far to find a solution to increase the number of beds, which has not changed since 1937. However a certain sum was provided in this year's budget for the necessary repairs and alterations ; and the work on these was begun just before the end of the year.

The number of patients remaining on January 1, 1948 was 5125. 3147 were admitted during the year and 3078 were discharged or died leaving 5,194 patients in residence at the end of the year. As the number of beds is 3334, there were 1860 patients over and above the normal accommodation.

### *Staff :*

The number of the medical, nursing, administrative and clerical staff stood without any increase in spite of the fact that law No. 141 of 1944 has burdened all categories of the staff with additional duties.

### *Accused Persons Suspected of Insanity :*

The 166 persons sent by the procurer general for examination were reported upon. Of these 46 were found not insane. Out of the remainder, 42 were accused of crimes of murder, attempted murder and similar crimes of violence; 69 were accused of theft and allied offences. The parquet has also asked for reports on 107 patients admitted in the ordinary way. Thus the number of persons reported upon amounted to 273.

### *Ages of Admissions :*

Ages of admissions ranged between 10 and 100 years.

### *Religions and Nationalities of Patients :*

Moslems, Christians and Jews and of unknown religions were admitted to both hospitals. Besides Egyptians ; admissions included Europeans and Near-Easterners.

### *Occupations of Male Patients:*

These were mainly artisans, farmers, merchants, preachers, officers, soldiers, and Government employees.

### *Residence of Patients*

Patients from all Provinces and Governorates of the Egyptian Kingdom were admitted to both hospitals.



*Physical Condition on Admission :*

The ratio in both hospitals was as follows :		Khanka	Abbassia
		%	%
Fair	... ..	31·1	64·66
Poor	... ..	59·1	29·93
Very poor or moribund	... ..	9·8	5·41

*Wassermann Tests :*

3003 specimens of blood and 34 specimens of cerebro-spinal fluid were sent to the Laboratories of the Ministry of Public Health for examination and gave various results.

*Scabies :*

378 cases of scabies were treated in Abbassia Hospital besides those treated in Khanka

*Accused Patients and Prisoners in Residence :*

Patients accused in crimes numbered 950.

*Deaths :*

The patients who died during their stay in the two hospitals numbered 363. The ratio of deaths compared with the total cases treated is 4.3 per cent as against 4.6 per cent in 1947, thus registering a satisfactory result.

*Ophthalmic and Dental Clinics :*

The work in both clinics continued for the benefit of the patients.

*Electric shock and Cardiazol Treatment :*

Treatment by both methods continued on a larger scale. Cases of schizophrenia, manic-depressive, confusional psychosis and anxiety neurosis were treated giving results varying between recovered, marked improvement, slight improvement, and no improvement.

*Accidents :*

48 major and 1,334 minor accidents took place in both hospitals. One of the major accidents was unfortunately fatal.

*Artificial Feeding :*

This was carried out 14,842 times without accident.

*Epileptic fits :*

8,059 epileptic fits were recorded during the year.

*Physical Illnesses :*

9,353 cases were treated locally from physical ailments.

*Births :*

11 children were born in the female wards at Abbassia Hospital.

*Autopsies :*

72 post-mortem cases were made during the year.



*Pharmacy. :*

42,420 prescriptions and 2154 photos were prepared in the pharmacy of Abbassia Hospital and an almost similar number in Khanka.

*X-Ray Department :*

183 films and 199 screenings were made in Abbassia Hospital.

*Central Medical Commissions :*

81 patients in Abbassia Hospital were reported upon to the Central Medical Commission

*Length of Residence :*

The length of residence ranged between one day and 40 years.

*Escapes :*

6 patients escaped from Khanka and 4 from Abbassia, two patients were recaptured and brought back to the Abbassia hospital.

*Khanka Farm :*

The production of vegetables from the farm continued as usual, being a mean of occupational therapy to the patients.

## Chapter XI.—Propaganda and Social Health

It is gratifying to state that the cholera epidemic which broke out in Egypt towards the end of the previous year was suppressed within a minimum record time, thanks to the health propaganda activities undertaken demonstrating to the public the means of infection and methods of protection.

Early in 1948 and following the suppression of the epidemic, certain precautionary measures were taken by the ministry against any possible future recurrence of the disease e.g. general inoculation of the population, anti-fly dusting with D.D.T. and examination of contacts for detection of disease carriers. Much propaganda efforts were at the same time spent to arouse the interest of the population and urge them to respond to the call of the health authorities.

Health propaganda was carried out by the following means :

### *I.—Health Propaganda Vehicles :*

Accompanied by preachers, these vehicles toured towns and villages according to a prearranged programme covering such localities where the precautionary measures were taken. Instructions and advice were delivered to the population by loud speakers, films were shown and pamphlets on cholera were distributed.

### *II.—Literature :*

Two million pamphlets and 200,000 posters were printed and distributed urging the population to be inoculated. 100,000 copies of an illustrated booklet on means of infection and protection were also printed.

### *III.—Broadcasting :*

Talks, performances and news bulletins were broadcasted daily.

### *IV.—Press :*

Arrangements were made with all newspapers and periodicals to publish the Ministry's instructions and advice to the population.

### *V.—Health Films :*

A special film was produced demonstrating the methods of control of cholera and protection therefrom, as well as the sanitary precautions taken by the ministry for the protection of the population. Thirty copies were made of this film which were shown in all cinemas throughout the country. Besides, the film was also shown in villages, societies and institutions by the propaganda mobile units. This film has become a technical record of the progress of the epidemic and methods of its control. The negative was loaned to the World Health Organization for the production of copies for circulation amongst all scientific bodies.

### *VI.—Preaching :*

The Preaching Section of Al Azhar contributed in the propaganda campaign against the epidemic. Arrangements were made to enable all its preachers to advise the public. Some 500,000 copies of sermons were printed and distributed to Imams of Mosques for delivering to worshippers.

### *Cooperation with private and governmental bodies :*

Among the authorities that contributed in the health propaganda campaign through their own units were the Ministry of Social Affairs, the school hygiene department of the Ministry of Education, the Ministry of National Defence and certain private institutions having social activities, e.g. the Red Crescent Society and Mohamed Ali el Kebir Foundation.

Following the declaration of Egypt's freedom from cholera, the Propaganda Section resumed its original activities of diffusing health propaganda among all classes of the population.



The following figures illustrate the various activities carried out during the year under review :

	Number
Day time propaganda meetings ... ..	4,350
Evening propaganda meetings ... ..	2,130
Propaganda meetings in Markets ... ..	1,930
„ „ „ Moulids ... ..	172
„ „ „ Schools ... ..	8,310
„ „ „ Army and Police Barracks, ... ..	167
„ „ „ for workmen ... ..	245
„ „ „ in cinemas ... ..	185
„ „ „ „ social institutions ... ..	255
Lectures on Cholera ... ..	2,360

*Cooperation with other Sections of the Ministry :*

In addition to activities undertaken during the cholera epidemic, the Propaganda Section organized propaganda meetings in conjunction with the other sections of the ministry, e.g. during the tuberculosis week, the endemic diseases week, and the nutrition week. Health fairs were held in different parts of the country to which were invited all classes of the population. Films were shown, lectures delivered and pamphlets dealing with the particular problems were distributed.

## Part. III.—MEDICAL TREATMENT

### Chapter XII—General Hospitals

#### *Number of Hospitals :*

There were 89 General Hospitals in operation this year. 28 of these were located in Governorates and Mudirias and 56 in Markazes. Besides, there were five out-patient clinics.

#### *Hospital Accommodation :*

The total number of hospital beds this year was 7,171 of which 6055 were reserved for patients and 1,116 for the staff.

#### *Treatment :*

The number of in-patients amounted to 99,092, and the out-patients to 2,165,007.

#### *Surgical Operations :*

The number of surgical operations performed in the in-patient departments this year was 39,628 and in the out-patient departments 73,604. This gives a total of 113,232 operations as compared with 39,346, 74,326 and 113,672 respectively in the previous year.

#### *X-Ray Examinations :*

The number of cases examined and treated by X Ray this year was 27,248 as against 25,304 in 1947.

#### *Deaths :*

The number of deaths amongst the 99,093 in-patients was 3,723 or 3.75% as compared with 5.06% in the previous year.

**TABLE No. 83.— NUMBER OF HOSPITALS OPERATED BY THE HOSPITALS SECTION DURING THE PERIOD FROM 1937-1946.**

Year	Hospitals in chief towns of Provinces and Governorates	Hospitals in district towns	Village Hospitals	Hospitals in the Oases	Out-Patient Clinics
1938 ... ..	20	48	62	—	3
1939 ... ..	20	48	62	—	3
1940 ... ..	20	51	62	—	3
1941 ... ..	20	52	—	—	3
1942 ... ..	20	52	—	—	4
1943 ... ..	26	52	—	—	3
1944 ... ..	27	53	—	—	2
1945 ... ..	27	53	—	6	2
1946 ... ..	28	61	—	6	2
1947 ... ..	28	56	—	—	4
1948 ... ..	28	56	—	—	5



TABLE No. 84.— NUMBER OF BEDS IN GENERAL HOSPITALS

Year	No. of Beds	Notes
1938 ... ..	6,822	
1939 ... ..	6,979	
1940 ... ..	6,926	
1941 ... ..	6,969	The Venereal Diseases Hospitals were detached from the Section.
1942 ... ..	6,880	The Village Hospitals were detached from the Section.
1943 ... ..	6,363	
1944 ... ..	6,553	Alexandria Hospital was detached from the Ministry.
1945 ... ..	6,663	
1946 ... ..	7,017	
1947 ... ..	6,897	The Oases and Demerdash Hospitals were detached from the Section.
1948 ... ..	7,171	

TABLE No 85.—DISTRIBUTION OF HOSPITAL BEDS

Hospital	1st Class	2nd Class	3rd Class Paying	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Beds for Staff	Total No of Bed
King's ... ..	—	—	—	279	9	—	298	98	386
Helmiet-el-Zeitoun ... ..	—	—	—	330	12	—	341	91	433
Boulaq Health Centre ... ..	—	—	—	32	—	6	38	30	68
Incurable Diseases, Helwan ... ..	—	—	—	90	—	—	90	18	108
Port-Said ... ..	2	2	16	248	14	—	282	38	320
Suez ... ..	8	15	—	164	—	25	212	31	243
Damietta ... ..	—	2	—	89	—	37	128	13	141
Damanhour ... ..	—	4	—	89	5	—	98	15	113
Tanta ... ..	—	4	—	216	4	—	224	88	312
Mansoura ... ..	—	—	—	192	10	—	202	27	229
Mit Ghamr... ..	—	—	—	59	—	12	59	10	69
Zagazig ... ..	1	3	—	208	12	—	224	16	240
Shebin-el-Kom ... ..	—	2	—	88	—	—	90	6	96
Benha ... ..	—	—	—	69	—	—	69	10	79
Kaliub... ..	—	—	—	89	—	—	89	4	93
Fayoum ... ..	—	1	—	92	4	—	97	8	105
Beni-Suef ... ..	—	—	—	114	—	—	114	8	122
Minia ... ..	—	1	—	81	8	—	90	34	124
Fikria ... ..	—	—	—	28	—	13	41	8	49
Maghagha ... ..	—	—	—	—	—	—	—	1	1
Assiut ... ..	—	4	—	189	11	—	204	18	222
Mallawi ... ..	—	—	—	28	—	11	39	4	43
Souhag ... ..	—	2	—	103	—	—	105	24	129
Tahta ... ..	—	—	—	33	—	—	33	3	36
Qena ... ..	—	—	—	1	2	—	63	12	75
Luxor ... ..	5	7	—	76	—	25	113	15	128
Esna ... ..	—	—	—	68	—	23	91	14	105
Aswan ... ..	1	2	—	45	—	25	73	3	76
Shubra-el-Kheima ... ..	—	—	—	22	—	—	22	3	25
Ismailia ... ..	—	2	—	84	—	12	98	17	115
Delingat ... ..	—	—	—	30	—	12	42	6	48
Kafr-el-Dawar ... ..	—	—	—	68	—	8	96	9	35
Rosetta ... ..	—	—	—	29	—	12	41	8	49
Shoubrakhit ... ..	—	—	—	28	—	12	40	8	48
Edfina ... ..	—	—	—	44	—	—	44	6	50
Mahmoudia... ..	—	—	—	29	—	11	40	9	49
Kafr Azzaz ... ..	—	—	—	21	—	—	21	5	26
Basintiwai ... ..	—	—	—	25	—	—	25	2	27
Desouk ... ..	—	—	—	20	—	—	20	4	24
Mehalla-el-Kobra ... ..	—	—	—	35	—	12	47	9	56
Samanoud ... ..	—	—	—	114	—	—	114	14	128
Tayeba ... ..	—	—	—	38	—	8	46	7	53
Sherbin ... ..	—	—	—	38	—	15	53	9	62
Zifta ... ..	—	—	—	39	—	12	51	8	59
Kafr-el-Sheikh ... ..	—	—	—	45	—	—	45	11	56
Fowa ... ..	—	—	—	59	—	—	59	7	66
Kafr-el-Zayat ... ..	—	—	—	36	—	6	42	7	49
Abcheet ... ..	—	—	—	32	—	8	40	11	51
Biala ... ..	—	—	—	—	—	—	—	—	—
Faraskour ... ..	—	—	—	—	—	—	—	—	—
Simbellawein ... ..	—	—	—	31	—	8	39	7	46
Manzala ... ..	—	—	—	50	—	12	62	9	71
Aga ... ..	—	—	—	45	—	—	45	10	55
Dikernes ... ..	—	—	—	44	—	8	52	10	62



TABLE No. 85 (contd.)

Hospital	1st Class	2nd Class	3rd Class Paying	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Staff Beds	Total No. of Beds
Kom-Hamada ... ..	—	—	—	29	—	11	40	9	49
Ashmoun ... ..	—	—	—	52	—	12	64	8	72
Menouf ... ..	—	—	—	60	—	16	76	11	87
Zawyet el Na'oura ... ..	—	—	—	33	—	14	47	9	56
Shebin el Kanater ... ..	—	—	—	27	—	12	39	8	49
Saff ... ..	—	—	—	31	—	12	43	8	51
Ayat ... ..	—	—	—	49	—	16	65	10	75
Itsa ... ..	—	—	—	27	—	12	39	7	46
Wasta ... ..	—	—	—	25	—	12	37	9	46
Beba ... ..	—	—	—	35	—	12	47	10	57
Beni-Mazar ... ..	—	—	—	40	—	8	46	13	61
Fashn ... ..	—	—	—	20	—	12	41	9	50
Samalout ... ..	—	—	—	69	—	—	68	8	76
Deirout ... ..	—	—	—	30	—	12	42	10	52
Badari ... ..	—	—	—	23	—	8	31	7	38
Sahel Selim ... ..	—	—	—	25	—	8	33	12	45
Manfalout ... ..	—	—	—	34	—	—	34	6	40
Mataana ... ..	—	—	—	—	—	—	—	—	—
Abutig... ..	—	—	—	35	—	8	43	8	51
Akhmim ... ..	—	—	—	28	—	12	40	7	47
Baliana ... ..	—	—	—	24	—	12	36	7	43
Gerga ... ..	—	—	—	50	—	12	62	9	71
Dishna... ..	—	—	—	25	—	8	33	9	42
Kous ... ..	—	—	—	35	—	12	47	7	54
Nag-Hamadj ... ..	—	—	—	28	—	14	42	9	51
Kom-Ombo... ..	—	—	—	26	—	—	26	3	29
Edfou ... ..	—	—	—	27	—	14	41	5	46
Eneiba... ..	—	—	—	9	—	—	9	1	10
Dahabiet el Dirr ... ..	—	—	—	—	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>17</b>	<b>51</b>	<b>16</b>	<b>5,243</b>	<b>91</b>	<b>637</b>	<b>6,055</b>	<b>1,116</b>	<b>7,171</b>

**Treatment;**

The following table No. 86 shows the number of patients treated in the hospitals :

TABLE No. 86

Year	No. of In-Patients	No. of Out-Patients	No. of attend- ance at out- patient sections
1944 ... ..	94,895	2,286,758	3,980,336
1945 ... ..	96,663	1,800,888	3,495,322
1946 ... ..	103,496	2,285,035	3,920,413
1947 ... ..	92,699	1,952,519	3,363,931
1948 ... ..	99,092	2,165,007	3,520,316

*Operations and X-Ray Examinations :*

The following table No. 87— shows the number of operations and X-Ray examinations performed in the hospitals during the last 5 years :—

TABLE No. 87

Year	In-Patients Operations	Out-Patients Operations	Total	X-Ray Examinations
1944... ..	32,174	73,622	105,796	21,639
1945... ..	37,730	76,447	114,177	28,565
1946... ..	40,454	79,977	120,431	29,309
1947... ..	39,346	74,326	113,672	25,304
1948... ..	39,628	73,604	113,232	27,248

*Deaths.*

The following table No. 88— shows the number of in-patients treated in the hospitals during the last five years and the number of deaths and death-rates for each year :

TABLE No. 88

Year	No. of In-Patients	No. of Deaths	Percentage
1944... ..	94,895	5,678	5.99
1945... ..	96,663	4,570	4.72
1946... ..	103,496	3,453	3.3
1947... ..	92,699	4,693	5.06
1948... ..	99,092	3,723	3.75

*Venereal Diseases :*

The following table No. 89.—shows the number of prostitutes treated in the General and District hospitals during the year 1948 :

TABLE No. 89

	Number
Gonorrhoea ... ..	6
Syphilis ... ..	32
Other diseases ... ..	—
<b>TOTAL ... ..</b>	<b>38</b>

The following table No. 90—shows the total number of patients treated for venereal diseases in the General and District hospitals during the year 1948 :

TABLE No. 90

In-Patient Sections			Out-Patient Sections		
Gonorrhoea	Syphilis	Total	Gonorrhoea	Syphilis	Total
12	208	220	4,348	18,917	23,265

TABLE No. 91.—NUMBER OF VISITS TO VENEREAL DISEASES PROPHYLACTIC CENTRE IN CAIRO DURING 1948

Months	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Number of Visits. ...	268	204	—	208	277	307	206	208	306	237	240	277	2378



## Chapter XIII.—Ophthalmic Hospitals

Active steps are being taken to extend ophthalmic treatment to all parts of the country. A progressive program has been prepared and is being executed as and when budget allocations permit. Credits have been allocated for the provision of four ophthalmic branches at Etai-El-Baroud, Abul Matamir, Inshas and Bab El Shaaria, Cairo, an out-patient clinic at Deirut and the expansion of Mallawi branch.

### *Clinical Works :*

The following table No. 92 gives a summary of the clinical work carried out during 1948 as compared with corresponding figures for the previous year.

TABLE No. 92.

	1948	1947
New Patients ... ..	1,208,209	1,102,994
In-patients ... ..	33,572	32,250
Operations ... ..	220,806	229,115
Out-patients attendance ... ..	6,806,942	6,373,798

The number of patients who were found blind in one or both eyes, excluding cataract cases causing blindness, was 41,523 or 3.2% of the total patients examined at the ophthalmic hospitals. By adding the cataract cases causing blindness, this ratio becomes 3.4%

Acute ophthalmias represent 81% of the causes of blindness.

The gonococcus is still the predominant factor of infection with acute ophthalmias; its ratio to total micro-organisms being 43.5%.

### *Ages of Patients :*

Of a total of 1,208,209 new patients treated, 108,729 or 8.9% were under one year of age; 356,569 or 29.5% between one and fifteen years; and 288,927 or 23.9% between 15 and 30 years; i.e. 645,496 or 53.4% were between the ages of one and thirty years, which indicates the interest taken by the majority of the population in ophthalmic treatment.

### *Other Services :*

Ophthalmic medical officers of this Ministry pay regular visits to the following hospitals and institutions for the examination and treatment of ophthalmic cases :

Leprosy colony and hospital at Abu Zaabal and Syioufia; Mental hospitals at Abbassi<sup>a</sup> and Khanka; Children Preventoria at Giza and Zeitoun; Amryia Dispensary; Fever hospitals at Abbassia and Embaba; Convalescents settlement and preventorium at Marg.

From time to time, ophthalmologists are sent to the frontier districts of Arish, Tor and Oases for the treatment of their inhabitants.

Ophthalmologists also accompany the medical mission which proceeds annually to the Hedjaz during the pilgrim season for the examination and treatment of all pilgrims.

Ophthalmic units of other ministries and departments are provided with trained ophthalmologists from this Ministry.

Assistant midwives and health visitors of the rural health units are also trained in ophthalmic treatment technique so that they may undertake these duties when dealing with cases of ophthalmias.

*Accommodation :*

The number of beds in all ophthalmic units was 2,369. Wherever space permits, the in-patients sections in ophthalmic hospitals are provided with more beds.

*Post Graduate Course of Ophthalmology :*

The faculty of Medicine of the Cairo University provides a post graduate course in ophthalmology for fresh graduates who wish to specialise in that branch.

*Ophthalmic Library :*

The circulating ophthalmic library, with its headquarters at Rod El Farag Ophthalmic hospital, continues to provide junior ophthalmologists in ophthalmic units with up-to date literature on new ophthalmic developments.

*Modern apparatus for Ophthalmic Hospitals :*

The Ministry keeps the ophthalmic hospitals supplied with modern ophthalmic apparatus and equipment, thus keeping pace with new achievements in the ophthalmic field.



## Chapter XIV. — Pharmacies

### *Private Pharmacies :*

The Ministry granted this year 43 permits for new pharmacies and authorised the transfer of ownership of 24 pharmacies, some of which were owned by non pharmacists, to qualified pharmacists.

### *Cairo Night Service Pharmacies :*

Of the four night service pharmacies in operation, one ceased to give this service leaving three in operation.

### *Agents :*

16 permits were granted to pharmaceutical agents. Eleven of these possessed depots.

### *Registration of Egyptian Specialities :*

Of 78 Egyptian pharmaceutical specialities submitted to the Ministry for registration, 68 were registered and ten refused. This brings the total registered Egyptian specialities to 1580.

### *Pharmaceutical Laboratories :*

One pharmaceutical laboratory was authorized and two closed down in Cairo.

### *Violation of the Law :*

A total of 296 contraventions were brought before the courts by the Ministry. Of these, 153 were for trading in or being in possession of poisonous substances and drugs without permits, four for practising pharmacy without authorisation and 104 were against pharmacists for violating the law.

### *Schedules 1 and 2 Poisonous Drug Stores :*

14 permits were granted this year : (6 in Cairo, 2 in Giza, 2 in Assiut, one in each of Qena, Zagazig, Menoufia and Gharbia).

### *Schedule IV Drug Stores :*

32 permits were granted : 15 in Cairo, 13 in Alexandria, and one in each of Damietta, Tanta, Damanhour and Giza. This last has since been withdrawn.

### *Schedule V Drug Stores :*

Four permits were granted: 2 in Alexandria and one in each of Cairo and Assiut. This last has since been withdrawn.

### *Schedule XI Drug Stores :*

16 permits were granted : Three in each of Cairo, Gharbia and Sharkia; 2 in each of Dakahlia and Arish and one in each of Giza, Beni Suef and Behera. The last has since been withdrawn.

## Chapter XV.—Universities Hospitals

### *Manial Hospital :*

The accommodation in this hospital remains the same this year as in the previous year namely 1438 beds.

### *In-Patients Department :*

In-patient admissions during 1948 totalled 15,706 as compared with 21,472 in-patients in the previous year or 5,766 patients less. This notable decrease is due to :

(a) The appearance of a number of cholera cases or suspected cases among in-patients early in 1948 which necessitated the closure of certain sections of the in-patients department.

(b) The going on strike in April of male orderlies. Work in hospital was suspended for some time. The orderlies were dismissed and female attendants appointed in their place.

Discharges included 12,007 patients recovered, improved or at their request ; 3,029 patients referred to the out-patients department or other hospitals for completion of treatment ; and 630 deaths. The death rate was 4.02% as against 4.2% in 1947.

### *Out-Patients Department :*

There were 658,797 out patients this year as against 811,666 in 1947 or 152,869 out patients less. The causes of the decrease are the same as for the in-patients.

There were 206,977 new out-patients and 451,830 old as against 295,209 and 516,457 respectively in 1947.

Diagnosis of medical diseases treated within the in-patients departments fall under ten principal headings. The following are details of these headings and number of patients treated in each :

- (1) Respiratory system diseases numbered 1946 (1478 males and 468 females).
- (2) Digestive system diseases numbered 1960 (1283 males and 677 females).
- (3) Diseases of the Cardio Vascular system numbered 2,587 (1678 males and 909 females).
- (4) Diseases of the Uro-genital organs numbered 746 (363 males and 183 females).
- (5) Diseases of the Central nervous system numbered 1309 (947 males and 362 females).
- (6) Diseases of the Blood, lymphatics and Spleen numbered 715 (536 males and 179 females).
- (7) Diseases of the Metabolism and Endocrine glands numbered 549 (360 males and 189 females).
- (8) Diseases of the Joints and Bones numbered 377 (185 males and 192 females).
- (9) Infectious diseases and fevers numbered 166 (91 males and 75 females).
- (10) Miscellaneous diseases numbered 236 (146 males and 90 females).

### *Kasr el Ainy Hospital :*

The number of beds was this year 1237 or two beds more than last year. Admissions totalled 15,747 as against 24,810 in 1947 or 9063 less. The decrease is attributed to the same causes, namely, the closure of certain sections following the detection of suspected cholera cases among patients and the strike of male orderlies.



### Casualty Cases :

A total of 3,269 casualty cases were admitted to Kasr el Ainy hospital during this year as against 6,060 in 1947. Of this number, 2,786 were cured and 376 died. Falls accounted for 840 cases, tram and car accidents for 500 cases and burns and scalds for 427.

Discharges during the year totalled 16,391. Of this number, 9,804 were cured, 5,785 referred to out-patients department or other hospitals for further treatment, and 802 died giving a death rate of 4.9%. It is to be pointed out that 376 of these deaths were casualty cases.

### Children's Hospital :

In 1937, the hospital accommodation was 63 beds. In 1948, the number was 181 beds. This is 20 beds more than the previous year.

This hospital was principally designed for the treatment of medical diseases. 127 beds or 70% of the accommodation are now reserved for the treatment of these diseases. Until 1938, only medical diseases patients were admitted.

Since 1939, sections were opened for other diseases. Thus in 1948, there were 38 beds for surgical diseases, 9 beds for diseases of the ear, nose and throat, 4 beds for ophthalmic diseases and 3 beds for dental diseases.

The following table No. 93 gives a comparative distribution of the hospital accommodation from 1937 until 1948 :

TABLE No. 93

Section	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Medical ... ..	63	114	106	120	111	118	118	118	118	118	118	127
Surgical ... ..	—	—	9	19	30	30	30	30	30	30	30	38
Ophthalmic ... ..	—	—	—	—	—	—	—	—	—	—	—	4
Ear Nose and throat ... ..	—	—	6	6	9	9	9	9	9	9	9	9
Dental ... ..	—	—	—	—	—	—	4	4	4	4	4	3
<b>TOTAL ... ..</b>	<b>63</b>	<b>114</b>	<b>121</b>	<b>145</b>	<b>150</b>	<b>161</b>	<b>161</b>	<b>161</b>	<b>161</b>	<b>161</b>	<b>161</b>	<b>181</b>

### In-Patients Department :

During the year, the in-patients totalled 3,098 or more than twice their number in 1937. The following table No. 94 gives the number of in-patients admitted during the years 1937 — 1948.

TABLE No. 94

Years	Males	Females	Total
<b>1937...</b> ... ..	830	629	<b>1,459</b>
<b>1938...</b> ... ..	977	664	<b>1,641</b>
<b>1939...</b> ... ..	997	740	<b>1,746</b>
<b>1940...</b> ... ..	1,042	767	<b>1,809</b>
<b>1941</b> ... ..	1,313	906	<b>2,219</b>
<b>1942...</b> ... ..	1,366	977	<b>2,343</b>
<b>1943...</b> ... ..	1,493	1,038	<b>2,531</b>
<b>1944...</b> ... ..	1,597	1,031	<b>2,628</b>
<b>1945...</b> ... ..	1,473	1,047	<b>2,520</b>
<b>1946...</b> ... ..	1,447	991	<b>2,468</b>
<b>1947...</b> ... ..	1,653	1,253	<b>2,906</b>
<b>1948...</b> ... ..	1,779	1,319	<b>3,098</b>

Of the in-patients, 2204 were treated in the medical section, 633 in the surgical section 161 in the ear, nose and throat section, 68 in the ophthalmic section and 32 in the dental section.

Deaths totalled 627 or 20.4.%

The following table No. 95 shows the diagnosis of medical diseases cases treated during the year :

TABLE No. 95

Disease	Number of cases
Diseases of Nutrition ... ..	245
,, ,, Alimentary Canal ... ..	470
,, ,, Abdomen ... ..	77
,, ,, Respiratory system ... ..	475
Tuberculosis ... ..	152
Diseases of Cardio Vascular system ... ..	152
,, ,, Blood ... ..	90
,, ,, Endocrine glands ... ..	5
,, ,, Uro genital system ... ..	44
,, ,, Nervous system ... ..	128
,, ,, Skin ... ..	36
,, ,, Locomotor System ... ..	35
Infectious Diseases ... ..	139
Miscellaneous Dieases ... ..	156
TOTAL ... ..	2,204

*Out-patients Department :*

The out-patients numbered 552,835 (301,928 new and 250, 907 old) as compared with 595,471 (317,675 new and 277,796 old) in 1947 and 373,035 in 1939.



The following table No. 96 gives the distribution of out-patients according to sections:  
TABLE No. 96.

Year	Medical			Surgical			Ophthalmic			Ear, Nose and Throat		
	New	Old	TOTAL	New	Old	TOTAL	New	Old	TOTAL	New	Old	TOTAL
1937	109,120	138,986	248,106	3,362	17,611	20,973	9,623	22,738	32,361	3,602	10,888	14,490
1938	116,582	149,822	266,404	3,701	20,119	23,820	9,683	23,806	33,489	4,379	12,772	17,151
1939	123,954	140,084	263,038	3,630	15,268	18,898	11,251	22,000	33,251	4,352	9,183	13,535
1940	147,943	148,896	296,839	6,445	14,871	21,316	15,424	21,858	37,282	4,740	7,812	12,552
1941	159,665	159,347	319,012	12,987	18,287	31,274	15,292	20,266	35,558	5,404	7,563	12,967
1942	165,756	160,497	326,253	5,823	19,923	25,746	10,343	14,296	24,639	4,879	7,218	12,097
1943	156,490	119,039	275,529	6,795	17,793	24,588	15,687	14,408	30,095	6,237	7,152	13,389
1944	192,227	210,069	402,296	8,707	25,084	33,791	18,991	24,413	43,404	6,685	10,757	17,442
1945	199,828	148,769	348,597	9,933	30,271	40,204	16,913	20,162	37,075	6,417	9,068	15,485
1946	224,574	132,641	357,215	8,873	26,204	35,077	15,273	16,396	31,669	8,438	9,776	18,214
1947	234,733	146,318	381,051	9,922	28,205	38,127	15,754	16,672	32,426	9,915	12,046	21,961
1948	224,593	130,895	355,488	12,094	33,647	45,741	16,343	15,448	31,791	10,671	10,715	21,386

TABLE No. 96 (Contd.).

Year				Dermatology			Radiology			Dental			Grand Total		
				New	Old	TOTAL	New	Old	TOTAL	New	Old	TOTAL	New	Old	TOTAL
1937	...	...	...	9,804	32,128	31,932	2,343	10,420	12,763	—	—	—	137,854	222,771	360,625
1938	...	...	...	7,838	21,233	29,071	2,953	11,584	14,537	—	—	—	145,136	239,286	384,422
1939	...	...	...	8,018	18,376	26,394	3,211	14,708	17,919	—	—	—	153,416	219,619	373,035
1940	...	...	...	9,421	16,373	25,794	2,746	14,684	17,430	—	—	—	186,716	224,497	411,213
1941	...	...	...	14,487	20,802	35,289	3,306	20,564	23,870	—	—	—	211,141	246,829	457,970
1942	...	...	...	12,174	15,574	27,748	3,452	20,521	23,973	479	295	774	202,906	238,324	441,230
1943	...	...	...	26,821	22,701	49,522	3,650	23,010	26,660	865	906	1,771	216,545	205,009	421,554
1944	...	...	...	45,430	52,094	97,524	3,794	23,050	26,844	936	1,292	2,228	276,770	346,759	623,529
1945	...	...	...	48,371	49,845	98,216	4,683	25,245	29,928	1,069	1,279	2,348	287,214	284,639	571,853
1946	...	...	...	45,285	43,151	88,436	4,941	26,568	31,209	1,242	1,101	2,343	309,626	255,835	565,461
1947	...	...	...	40,913	42,002	82,915	5,080	31,258	36,338	1,358	1,295	2,653	317,675	277,796	595,471
1948	...	...	...	31,011	28,460	59,471	6,035	30,854	36,889	1,181	888	2,069	301,928	250,907	552,835



Most of the new out-patients, numbering 221,664 suffered from medical diseases, namely, 35,341 from diseases of nutrition; 103,877 from gastro-intestinal diseases; 41,163 from respiratory system diseases; 3,194 from tuberculous diseases; 3,281 from urinary system diseases; 3,420 from nervous system diseases; 1,119 from circulatory system diseases and 30,269 from infectious diseases.

#### ALEXANDRIA UNIVERSITY HOSPITALS,

##### *Accommodation :*

This remained the same as in the previous year, namely, 601 beds in the main Hospital and 111 in Shatby annex.

##### *In-Patients :*

The total number of in-patients treated during the year was 16,975 consisting of 10,580 males including 860 children and 6,395 females including 607 children.

Of the in-patients, 3920 suffered from medical diseases, 7,672 from surgical diseases, 1,335 from orthopaedic diseases, 518 from ophthalmic diseases, 371 from diseases of the ear, nose and throat, 1,190 from gynaecological and obstetric diseases, 148 from venereal and skin diseases, 112 from dental diseases and 41 from urinary system diseases.

According to diagnosis of medical diseases, there were 1334 cases of respiratory system diseases, 873 cases of digestive system diseases, 1,883 cases of cardio-vascular system diseases, 157 cases of uro-genital system diseases, 816 cases of central nervous system diseases, 419 cases of diseases of the blood, lymphatics and spleen, 367 cases of diseases of metabolism and endocrine glands, 336 cases of diseases of the joints and bones, 57 cases of infectious diseases and 378 sundry cases.

Diagnosis of surgical cases included 1,102 cases of wounds, 1,357 cases of fractures, 1,201 affections of intestines and 441 affections of kidneys.

##### *Out-Patients :*

These totalled 729,396 consisting of 234,773 new and 494,623 old out-patients.

#### ALEXANDRIA CHILDRENS' HOSPITAL

##### *In-Patients :*

The in-patients accommodation remains unchanged despite the ever increasing number of admissions. During the year, 1,670 children were discharged as cured. 163 deaths were recorded.

##### *Foundlings :*

Of 241 foundlings catered for by the hospital during the year, 109 died, three were transferred to orphanages and 15 were adopted.

##### *Out-Patients Department :*

Children attending the out-patients department this year numbered 71,448 consisting of 31,024 new and 40,424 old patients.

P.S. For further information, please consult detailed reports published by the Universities Hospitals Department.

## Part IV. — ENDEMIC DISEASES

### Chapter XVI. — Ancylostoma and Bilharzia

#### I.—TREATMENT

##### (1) *Out-patients :*

The following statement gives details of the number of new outpatients treated and number of injections and anthelmintic doses administered during the year as compared with corresponding figures in the previous year.

	1948	1947
Number of new outpatients ... ..	1,046,019	1,020,457
„ „ injections ... ..	3,867,355	3,553,688
„ „ anthelmintic doses ... ..	404,683	434,482

##### (2) *Treatment of Pupils under declaration of Parents :*

Of a total of 8,340 pupils examined this year, 3,052 were returned positive for bilharzia, 115 for ancylostoma and 161 for ascaris.

24,643 bilharzia injections and 166 anthelmintic doses were administered to them.

##### (3) *Treatment of Territorial Army :*

Of 6,049 men of the territorial army examined, 2,575 were returned positive for bilharzia, 1,708 for ancylostoma and 1,921 for ascaris. 39,563 bilharzia injections and 2,049 anthelmintic doses were administered to the positive cases.

##### (4) *Branch Clinics :*

These imply the appointment of stationary teams in villages for the examination of patients. Medical Officers of nearest units proceed three times a week to these villages to undertake treatment. There were seven branch clinics in operation this year at Manayel village, El Azhar, Marg, Sendioun, Ezbet Kazouli, Khanka and Talat Fayoum.

##### (5) *Meals served to anaemia and pellagra outpatients :*

The meals served during the year to anaemia and pellagra outpatients totalled 227,771

##### (6) *In-Patient Treatment :*

At the end of the year, 94 units were provided with inpatient accommodation. A total of 13,814 inpatients were treated. Of these, 8,951 inpatients were cured and the rest improved.

##### (7) *Compulsory Treatment Campaign :*

Owing to lack of medical officers and the lapse of prosecutions given under law No. 58 of 1941, compulsory treatment campaign units could not proceed further with the work. These units had to be transferred to localities adjoining district hospitals.

On the other hand, base units did not undertake any compulsory treatment. They gave voluntary treatment only.

#### II.—NEW UNITS

(1) A new branch has been provided within the Mataana District hospital for treatment of endemic diseases. Work has commenced on August 1, 1948. This brings the total number of endemic diseases units to 101.

(2) No new in-patient sections were allotted this year. By the end of the year 94 units were provided with in-patient sections accommodating 1,629 beds.

(3) A shuffle of the units was effected. Endemic diseases units are now evenly distributed throughout the country.



### III.—IMPORTANT OBSERVATIONS

#### (1) *Compulsory Treatment Campaign :*

(a) Monthly examination of negative cases and three monthly examination of positive cases were continued at Talat village, Fayoum.

(b) A committee was set up from representatives of the various authorities to study such modifications of the Bilharzia Control Law No. 58 of 1941 as will render its provisions effective and its application widespread.

#### (2) *Drug tests :*

(a) *Successive tarter emetic injections.*—With a view to shortening the duration of treatment, the Research Institute was asked to try the daily injection of tarter emetic instead of every other day. Experiments are still proceeding.

(b) *Two day concentrated treatment with Repodral.*—This method of treatment was introduced by the Research Institute. Before introduction into all units, it was proposed to try it first on strong inpatients of No. 20 Ancylostoma Hospital at Fom el Khalig. The experiments are still in progress.

(c) *Four-day abortive treatment with Ripodral.*—This method is being tried on out-patients of Fom el Khalig Ancylostoma Hospital under supervision of the Research Institute. The experiment is still in progress.

(d) *Two-day abortive treatment with tarter for out-patients.*—Experiments are in progress at Shubra Ancylostoma Hospital on the treatment of bilharzia out-patients in two days with tarter.

(e) *Ethylene tetrachloride treatment for ancylostoma.*—Experiments have been repeated by the Research Institute using the drug in solution form instead of giving it in capsules. The drug had no advantage over carbon tetrachloride except in the well known fact of being less poisonous.

#### (3) *New Treatments :*

(a) Atebrin has been introduced in the treatment of taenia instead of filix mas. Instructions have been laid down for the selection of patients, preparing them for treatment, doses and method of administration, treatment of symptoms and repetition of treatment.

(b) Modification of repodral doses for children : Repodral doses for children suffering from bilharzia have been increased to avoid relapses.

### IV.—COOPERATION WITH SECTIONS CONCERNED WITH TREATMENT OF ENDEMIC DISEASES

Cooperation with the various authorities interested in the treatment of endemic diseases was maintained. This consists of providing personnel, appliances and equipment. Joint examination centres have been set up in conjunction with the Frontier Districts Medical Service within its hospitals at Dakhla and Baharia Oases. The Section cooperated with the Fellah Service of the Ministry of Social Affairs at Dahshour, Sendioun and Manayel villages. A joint examination centre was set up in the Cairo, University, for the examination of students. Another examination centre was set up within the Gabbary dispensary, Alexandria. Another centre was provided in the Azhar University.

The committee on nutrition was requested to examine the inhabitants of Tamia village, Fayoum, with a view to determining the type and extent of the incidence of parasitic infections among them.

In cooperation with the Ministry of Education, all endemic diseases units undertake the examination of pupils. Positive cases are given the necessary treatment until they become negative. Negative cases are provided with certificates of freedom from parasitic infections. Some 55,733 certificates were issued during the year. Arrangements have been made this year for the examination of pupils in their schools on admission. Inspectors and medical officers of the units are also charged with the inspection of pupils' personal files for any irregularity.



## V.—CERTIFICATES OF FREEDOM FROM PARASITES FOR PUPILS, WORKMEN AND OTHER CATEGORIES :

In view of the success attending the issue to pupils of certificates of freedom from parasites, the Ministry was requested to instruct all schools to insist on the presentation of these certificates by pupils. Meanwhile Al Azhar, Alexandria and Cairo Universities have been requested to insist on presentation of these certificates by new pupils.

Moreover, the committees convened to amend the Anti Bilharzia Law No. 58 of 1941 have agreed to incorporate a provision requiring certain individuals and categories of the public to obtain certificates of freedom from parasites. By this means, the section has ensured that a substantial number of the population will be compelled to seek treatment of their parasitic infections.

## VI.—TRAINING

The training of new and old personnel with a view to raising their technical standard continues at the Training Centre in No. 20 Fom el Khalig Ancylostoma hospital. The training is given to personnel of the Section as well as of other medical services. During the year 21 new medical officers for the section completed their training as well as 21 medical officers for other services. 39 laboratory assistants for the section and 223 for other services were also trained. Besides, 16 new clerks and 17 pupil nurses were also trained before taking up their duties in the units.

## VII.—INSTRUCTION

Lectures were delivered to patients attending the units. These dealt with methods of protection against infection, the need for completing treatment to avoid serious complications, and the importance of avoiding sources of infection. Propaganda publications were distributed liberally to patients and posted on walls in thoroughfares, mosques, courts and other places frequented by the public.

Lectures were also delivered at Fom el Khalig hospital to social workers, pupil nurses, house visitors and assistant midwives who attended in successive batches. These lectures dealt with the life cycle of bilharzia and ancylostoma, and methods of protection therefrom.

Certain schools have been provided with preserved specimens of the various helminthes and of ova of the various parasites preserved in urine or stools.

These were instrumental in raising the standard of scientific education among pupils.



## Chapter XVII.—Malaria

### *Blood Specimens and their results :*

Out of a total of 77943 blood specimens examined microscopically this year from patients presenting themselves to government hospitals, 22,858 or 29.3 per cent were returned positive (both new infections and relapses) with an increase of 7.6 per cent compared to last year. Tables Nos, 105, 106 and 107 give the distribution of these specimens according to their types. The percentage of Malaria among patients presenting themselves to hospitals is higher than that amongst persons examined for general Malaria survey.

In addition, the Research Institute for Tropical Diseases examined the blood specimens that were sent from different localities. Table No. 108 gives details of the result of examination. Table No. 109 refers to blood specimens examined by malaria branches annexed to Ancylostoma hospitals in Suez, Desouk, Fowa, Kafr el Sheikh, Kafr el Zayat, Facous, Benha and Fayoum. The number of malaria stations remained the same as in the previous year namely, 36 main stations and 67 branch stations.

### *New Infections and Relapses :*

Out of 22,858 cases returned positive for malaria, 7167 cases or 31.3 per cent of total positive cases were considered new infections as against 30.7 per cent last year. 15691 cases were considered relapses.

### *Malaria in infants under one year :*

Table No. 110 gives the malaria general ratio among infants under one year of age in Lower and Upper Egypt. Malaria in infants is considered new infections.

### *Malaria and Splenomegaly :*

Table No. 111 gives a splenic index for persons not suffering from malaria and also for persons suffering from benign and malignant malaria.

### *Types of Malaria :*

Tables Nos. 112 and 113 give the incidence of the three types of malaria (Benign, Malignant and Quartan) in the Governorates and Provinces provided with malaria stations and the percentage of each type to total positive cases.

### *Monthly distribution of Malaria :*

Tables Nos 114 and 115 give the monthly distribution of malaria cases of all types in Lower and Upper Egypt.

It is observed that the incidence rate of the benign tertian type was highest in Lower Egypt during June and in Upper Egypt during May and June. The ratio of the malignant type was highest in Lower Egypt during October and November and in Upper Egypt during September and October.

### *Malaria cases reported in Governorates and Provinces during 1947 and 1948 :*

Table No. 116 gives the number of malaria cases and deaths reported to the Statistical Department from the Governorates and Provinces during 1947 and 1948. It shows that there were 9 deaths, 2303 new cases and 1871 relapses less than in 1947.

### *Survey of Mosquito Breeding Places :*

Mosquito breeding places were surveyed by malaria units on the same lines as in previous years. Priority of disposal was governed by the incidence of malaria. These were reported to the Public Utilities Service or other competent Department for disposal. Tables Nos. 117 and 118 give details of the survey work and results thereof.

*Control Work :*

Control work was carried out by the same methods as in the previous year. Table No. 119 gives details of the insecticides employed and the quantities consumed of each.

*Warnings and Contraventions :*

Besides control work, malaria units supervise the application of Malaria Law No. 1 of 1926 modified by Law No. 78 of 1946. Warnings and contraventions were served on offenders of the Law and judgments were given in certain cases. Table No. 120 gives details of the warnings and contraventions served in Lower and Upper Egypt.

*Filling up Ponds :*

The Village Affairs Department engaged to fill up 381 ponds as shown in table No. 121. Table No. 122 shows the ponds the local inhabitants undertook to fill in.

*Filariasis :*

Table No. 123 gives the distribution of blood specimens examined for filariasis by the Research Institute for Tropical Diseases. It shows that many cases of filaria are still present in Rosetta District, Behera Province.

*Treatment and Drugs :*

Malaria treatment was given to cases proved positive by microscopic examination. Table No. 124 gives details of the various drugs distributed by malaria units in Lower and Upper Egypt. Treatment is now available to malaria patients at all treatment centres throughout the country.

*Malaria Law No. 1 of 1926 modified by Law No. 78 of 1946 restricting rice and sugar cane cultivations :*

A Ministerial Arrêté dated April 13, 1948, forbidding rice cultivation around Tanta Bandar was published in the Official Journal No. 45 dated May 4, 1948.

*Control Work by Aircrafts :*

Type B.T. 13 aircraft of the Sanitary Air Squadron were again used this year in the control of mosquito breeding places. The aircraft generate either a fog of a 20 per cent D.D.T. and velsicol, or a spray of a 15 per cent D.D.T. and kerosene or malariol which were used for the control of rice cultivations or wide stretches of marshes in the minimum of time.



TABLE No. 97.—GIVES DETAILS OF AIRCRAFT OPERATIONS DURING THE YEAR.

Zone	Flying Time	Spraying Time	Oil in gallons	Benzine in gallons	Insecticides		Area in Acres	Mosquitoes Species	Pre-Spray	After the		After the		After the	Remarks
					15% D.D.T. in malariol	20% D.D.T. in Velsicol				First Spray	Second Spray	Third Spray	Fourth Spray		
Idku ... ..	H.M. 44.55	16.29	13	105	244	1,562	27,692	{ Larvæ Ano. Culex	{ 72 92	{ 38.1 46.2	{ 6.3 23.5	{ 3.8 11	{ 3.8 6.2	{ 2.5 4.2	The operation began on 12/6/1948 and terminated on 29/9/1948
Idfina and Mutobus ...	225.25	96.12	77 1/4	5,252	916	7,252	31,160	{ Larvæ Ano. Culex	{ 85 98.2	{ 27 47.3	{ 6 10.1	{ 25.4 26.3	{ 3.3 6.9	{ 1.9 4.5	The operation began on 15/6/1948 and terminated on 29/9/1948
Canal ... ..								{ Adult Mosq. Ano. Culex	{ 81.1 99	{ 33.9 51.5	{ 28 36.6	{ 29.3 38.6	{ 11 15	{ 10.5 11.2	The operation began on 21/10/1948 and terminated on 22/12/1948
Adult Mosquitoes															
Larvæ															
Anopheles															
Culex															
No. of Sprays	Anopheles		Culex		Anopheles		Culex								
	Pre-Spray	Post-Spray	Pre-Spray	Post-Spray	Pre-Spray	Post-Spray	Pre-Spray	Post-Spray							
3	3%	1.2%	21%	11%	26%	14%	61%	11%							

Survey of Wadi el Natroun area revealed the presence of 12 large birkas with an area of 3,399 feddans (acres), 12 small birkas with an area of 146 feddans and some 1295 feddans of waste land all of which harboured myriads of larvae of *A. Pharoensis*, *A. multicolor* and *Culex* as well as adult mosquitoes. Aerial control operations were carried out in this area between September and November 21, 1948. An average of 50 hours flying and 15 hours actual spraying were made in each operation. A total of about 23,460 feddans were sprayed in all at a total cost of L.E. 789.025 mills or 33.5 mills, per feddan, half of which was borne by the Salt and Soda Company.

This area which had swarmed with larvae and adult mosquitoes was almost freed from both. Besides, other insects, e.g. cockroaches, bugs, flies, etc., which bred in dwellings in great numbers and were a nuisance to the inhabitants were completely exterminated.

Scientific research shows that aerial spraying of the insecticides kills flies in the following ratios :

- (1) 72 per cent in open places.
- (2) 24.4 per cent in streets and lanes.
- (3) 44 per cent in houses and shops.
- (4) 48 per cent the general ratio.

The following table No. 97a gives details of spraying operations carried out by the Sanitary Air Squadron during 1948 :

TABLE No. 97a

The Date		Zone	No of sprayings	Flying Time		Spraying time		Benzine in Gallons	Oil in Gallons	Malariaol in Gallons	Velsico in Gallons	Area Sprayed in Acres	Total Expenses		Cost average per acre
Beginning	Termination			H	M	H	M						L.E.	Mills	
17- 1	10- 4	Idku	5	40	—	13	22	800	200	1,604	802	22,466	948	200	42.2
15- 4	15- 4	Isna	1	7	10	1	53	157.5	3.5	270	—	1,830	98	372	53.7
29- 4	27- 6	Cairo	3	13	35	5	24	293	4.75	—	715	9,988	595	400	59.6
12- 6	29- 9	Idku	4	44	55	16	29	1,052	13	244	1,562	27,692	1,368	000	49.4
15- 6	29-9	Idfina & Mutobus	5	225	25	96	12	5,252	77.25	916	7,252	131,160	6,356	075	48.4
21- 9	21-11	Wadi El Natroun	5	52	55	14	1	1,217	18.5	856	706	4,692	789	025	33.5
17-10	20-10	Inshas	1	6	40	1	27	158	3.5	—	176	2,275	140	800	61.8
2-10	22-12	Canal	3	107	35	26	31	2371	34.25	717	2,660	43,834	2,424	125	55.3

#### *Anti Mosquito Campaign in Fayoum.*

The anti mosquito measures adopted last year were continued this year. These consisted of spray painting dwellings with a 5 per cent D.D.T. and kerosene for built up houses and 5 per cent D.D.T. and malariaol for unbaked brick huts.

(1) 54 darakat (zones) were treated during this year or 83 during 1947-1948 out of 175 darakat representing the whole province.

(2) The average cost of spray painting one house was 915 mills, or 245 mills per head.

(3) The personnel of the campaign consisted of one doctor in charge of the campaign, an engineer and 202 junior staff. They had at their disposal four lorries and a Jeep.

(4) The incidence of malaria (new and relapses) during 1946-1948 in Fayoum Province shows a gradual decrease as shown in the following table No. 98 :



TOTAL No. 98

Year	New	Relapse	Remarks
1946... ..	1,622	—	Relapses were not reported to the Statistical Department.
1947... ..	969	2,469	
1948... ..	147	1,386	

The infestation ratio for larvae and mosquitoes during 1946-1948 are shown in the following table :

TOTAL No. 99

Larvag Species	1946		1947		1948			Remarks
	Larvae	Mosq	Larvae	Mosq	Larvae	Adult Mesquito		
						Pres. Spray	Pest. Spray	
A. pharoensis ... ..	2.9	17.8	0.7	3	1.1	6.2	2.4	General survey was carried out during 1946 & 1947. Spray painting of houses began on 1/1/1948.
A. mutlicolor ... ..	1.8	9	1.6	5	0.5	4.6	0.82	
A. sergenti... ..	5.6	5.6	0.1	0.88	0.08	2.3	0.18	

Larvae control was started on April 1, 1948 and maintained until the end of the year in Fayoum and Sennoris Districts by using 5 per cent D.D.T. in malariol — Adult mosquito control was begun on January 1, 1948 by spray painting houses in the four districts of the Province. The work was then confined to Fayoum and Abshaway districts from April 1, 1948, until the end of the year.

The following table No. 100 gives details of larva and mosquito control work during 1948 as compared with the previous two years.

Zone	No of darakat	1946	1947		1948		Remarks
		Larvae Control	Larvae control with Malariol	Experiment of Adult Mosquite Cont ol	Larvae Control with malariol	Adult Mosquite control with D.D.T. Malariol	
Fayoum ...	46	11 darakat with D.D.T. malariol	11 darakat	11 Darakat round Bandar	11 darak.	33 darak were spray painted	Adult Mosquito control was carried out during 1948 by using D.D.T. in malariol and D.D.T emulsion.
Sennoris ...	47	10 with paris green	10 darakat	18 darakats	10 „	3 darak were spray painted	
Abshaway	34	9 with paris green	9 „			12 darak were spray painted	
Itsa ... ..	48	9 with paris green				5 darak were spray painted	

The following table No. 101 shows the monthly distribution of larva species discovered from April till December 1948.

TABLE No. 101

	April	May	June	July	August	Sept.	October	November	December
No of Units examined ... ..	4,433	3,756	6,291	7,616	7,363	7,424	5,463	8,909	7,204
No of Sergenti species. ... ..	7	1	1	7	2	—	—	2	21
No of Pharoensis species. ... ..	29	20	66	46	72	116	70	85	23
No of multicolor species. ... ..	35	55	36	30	30	4	1	18	16
Percentage for Sergenti ... ..	0.16%	0.02%	0.01%	0.08%	0.02%	—	—	0.2%	0.29%
„ for Pharoensis ... ..	0.6%	0.5%	1.5%	0.6%	0.9%	1.57%	1.2%	0.9%	0.3%
„ for Multicolor ... ..	0.7%	1.4%	0.5%	0.3%	0.4%	0.5%	0.01%	0.2%	0.2%
TOTAL ... ..	71	76	103	83	104	120	71	105	60

Remarks :

(1) Until March 1948, the survey work was not yet finished.

a-Larvae control was begun on 1st. April.

b-The period from 1st. April till the end of June is considered pre-control,

The Total number of units examined in Fayom and Sennoris was. 14,480

Specimens returned positive numbered 250

Ratio 1.2%

c-The period from July till the end of December is considred post-control.

The Total number of units examined in Fayoum and Sennoris 43,979

Positive specimens 543

Ratio. 1.2%

The following table No. 102 gives details of houses and rooms spray painted during 1947 and 1948 :

TABLE No. 102

Zene	1947		Zone	1948		Remarks
	No. of Houses	No. of rooms		No. of Houses	No. of rooms	
Round Fayoum Bnd	5,484	28,724	Fayoum ... ..	25,115	121,646	Control work was carried out in the four districts until March 31,1948 and in Fayoum and Abshaway after that.
The north WestArea	10,688	45,833	Sennoris ... ..	5,203	22,455	
			Abshaway ... ..	15,518	68,817	
			Itsa ... ..	5,450	23,608	
TOTAL ... ..	16,172	74,557	TOTAL ... ..	51,286	236,526	

The insecticides consumed during 1948 were, 566.8 gallons of flit, 0.364 ton of paris green 8.779 tons of kerosene, 0.43 ton of D.D.T. in kerosine 855.919 tons of malariol, 42.796 tons of D.D.T. in malariol and 1.300 tons of D.D.T. emulsion.



# Mosquito Control in Cairo.

Mosquito control in Cairo was carried out on the same lines as in previous years. The number of darakat was increased to 92 as against 85 in the previous year, distributed among districts having 117,413 houses. 32,592 of these were connected to the main drainage system and the rest or 72 per cent were drained in private cesspits as shown in table No. 103 :

TABLE No. 103

Serial Number	District.	No. of Darakat		No of Houses.			Remarks
		Houses	Farms	Draining in cesspits	Connected. with Ma'ndrainage	TOTAL	
1	Shoubra ... ..	13	1	18,806	9,291	28,097	
2	Daher ... ..	13	4	14,306	9,250	23,556	
3	Fom El Khalig ...	13	—	11,730	6,657	18,387	
4	Darb El Ahmar ...	13	—	13,280	4,282	17,562	
5	Imam El Shafie ...						
6	Zeitoun ... ..	8	2	5,444	2,295	7,739	
7	Maadi ... ..	5	2	6,012	22	6,034	
8	Helwan ... ..	3	1	2,690	—	2,690	
9	Giza ... ..	8	—	7,726	226	7,992	
10	Imbaba ... ..	6	—	4,827	529	5,356	Under the control of Giza Malaria St.
	TOTAL ... ..	82	10	84,821	32,592	117,413	

The field of operation is bounded as follows :

*North.*—By Ismailia Canal at Shoubra el Kheima and by Tewfikia Canal till Kafr Farouk

*East.*—By the Eastern Desert and Mokattam Hills.

*South.*—Kafr el Elw, Helwan, Farouk Corner, Ezbit el Wabour, the Northern and Southern Ezbas.

*West.*—The Western Nile Bank including Giza Bandar and Imbaba.

Mosquito control consists of :

- 1---Mosquito control in habitations.
- 2---Malaria control in cultivated land.
- 3 --Sanitary reforms.

Concerning the first and third items, private cesspits were sprayed weekly with 25 c.cs of malariol each. Warnings were served on owners for lacking sanitary requirements imposed under malaria Law No. 1 of 1926. In the case of failure, the source of the offence was removed at the expense of offenders. The Cairo Health Department took action against overflowing cesspits.

Cultivated lands are examined weekly and in the case of infestation are sprayed with D.D.T. in malariol or paris green, or D.D.T. emulsion. Sometimes the governmental drains are cleared from vegetations. 61.500 tons of D.D.T. in malariol, 31 kgs. of paris green and 300 tons of emulsion were consumed. The Nile flood was not so high this year, hence seepage water appeared in few places in Cairo totalling 11 feddans in area.

This branch took part in the Palestine Malaria Campaign by delegating a team consisting of a doctor, a laboratory assistant, three overseers and two drivers.

During this year 67,231 houses were spray painted in Cairo City and suburbs consuming 300.900 tons of 5 per cent D.D.T. and kerosene

The following table No. 104 gives details of larva species detected in Cairo during 1948.

TABLE Mo. 104

Larva Species	Shoubra	Daher	Fom El Khalig	Imam El Shafie and Darb El Ahmar	Zaitoun	Maadi	Helwan	TOTAL
	1	2	3	4	5	6	7	
Anophele Pharoensis ...	14	27	—	—	—	12	11	64
„ Multicolor ...	—	—	—	—	—	—	—	—
Culex Pipiens ... ..	39	39	11	—	32	62	38	221
„ Prexigous ...	1	1	—	—	—	2	6	15
„ Laticinctus ...	—	—	—	—	—	—	—	—
Aedes Aegypti ... ..	—	—	—	—	—	2	—	2
„ Caspius .....	2	8	—	—	1	6	8	20
TOTAL ... ..	56	75	11	—	33	84	63	322

The strength of the Cairo Malaria Central Branch is made up of 3 supervisors, 13 controllers, 2 surveyers, 84 overseers, 19 chief labourers and 366 labourers under the supervision of a medical officer and an engineer.

#### Propaganda:

As in last year, propaganda activities were carried out in conjunction with Health Propaganda units. Every propaganda means was employed to explain to the inhabitants the life cycle of the malaria carrier mosquito, its characteristics, means of its spread and methods of protection and treatment.

#### Complaints:

All complaints forwarded to the malaria units received due consideration and the cause of the complaints removed.

#### Sanitary Engineering Service :

Out of 104 orders for lacking sanitary conditions in Cairo dwellings prescribed by this Service under Law No. 1 of 1926 amended by Law No. 78 of 1946, 11 orders were carried out by the proprietors. The remaining 93 were charged to a contractor against a credit of L.E. 2000 allocated for the purpose. The contractor carried out 22 orders and failed to carry out the rest. These were carried out the following year.

TABLE No. 105 DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES DURING 1948

Category	No. of Specimens	Positive			Rate Percent	Remarks
		New	Relapse	Total		
1. Attendance at Malaria units ...	45,793	5,993	10,902	16,895	36.8%	
2. Suspected Persons at their residence ...	8,364	1,070	1,769	2,839	33.9%	
TOTAL ... ..	54,157	7,063	12,671	19,734	36.5%	



TABLE No. 106. — DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA  
IN UPPER EGYPT AND FRONTIER DISTRICT GOVERNORATES DURING 1948

Category	No. of Specimens	Positive			Rate Percent	Remarks
		New	Relapse	TOTAL		
1. Attendance at Malaria units... ..	17,581	97	2,647	2,744	15.6	
2. Suspected Persons at their residence..	6,205	7	373	380	6.1	
TOTAL ... ..	23,786	104	3,020	3,124	13.1	

TABLE No. 107 — SHOWING DISTRIBUTION OF BLOOD FILMS FOR THE WHOLE OF EGYPT  
DURING 1948

Category	No. of Specimens	Positive			Rate Percent	Remarks
		New	Relapse	TOTAL		
1. Attendance at Malaria units ...	63,374	6,090	13,549	19,639	30.9	
2. Suspected Persons at their residence ...	14,569	1,077	2,142	3,219	22	
TOTAL ... ..	77,943	7,167	15,691	22,858	29.3	

TABLE No. 108. — NUMBER OF SPECIMENS EXAMINED FOR MALARIA  
BY RESEARCH INSTITUTE DURING 1948

Category	No. of blood Specimens	Positive Malaria				Rate Percent	Remarks
		Benign	Malig	Mixed Infec.	Total Positive		
1. Specimens from Hospital ... ..	1,219	335	37	1	373	30.6	
2. Specimens from malaria stations and Outposts ... ..	5,873	256	20	—	276	4.6	
3. Specimens from Ancylostoma Unit	312	69	11	—	80	25.6	
TOTAL ... ..	7,404	660	68	1	729	9.8	

TABLE No. 109. — NUMBER OF SPECIMENS EXAMINED BY MALARIA UNITS ATTACHED  
TO ANCYLOSTOMA HOSPITALS IN EGYPT DURING 1948

Ancylostoma Hospitals	No. of Blood Specimens	No. of Positive Malaria Cases	Rate Percent.	Benign Tertian			Malignant Tertian			Remarks
				No.	New.	Relapse.	No.	New.	Relapse.	
Suez ... ..	96	2	4.2	1	—	1	1	—	1	From January to March 1948 only
Dessouk ... ..	5,153	2,041	39.6	1,723	1,284	439	318	263	55	
Fowa ... ..	4,049	2,632	65.	1,781	—	1,781	851	—	851	
Kafr El Sheikh...	4,896	2,269	46.3	2,240	1,077	1,163	29	16	13	
Kafr El Zayat ...	93	23	24.7	21	21	—	2	2	—	
Faccous ... ..	335	166	32.4	166	105	61	—	—	—	
Benha ... ..	697	136	15.2	128	58	70	8	8	—	
Fayoum ... ..	1,230	305	24.7	276	110	166	29	22	7	

TABLE No. 110.— MALARIA INCIDENCE AMONG INFANTS UNDER ONE YEAR OF AGE  
IN LOWER AND UPPER EGYPT DURING 1948

Name of Station	No of Children examined, for Malaria	Positive	Rate Percent	Remarks
Ismailia (Canal) ... ..	216	—	—	
Idku (Behera) ... ..	210	42	20	
Biala (Gharbia) ... ..	49	19	39.3	
Mehalla El Kobra (Gharbia)	40	11	27	
Dekernis (Dakahlia) ... ..	56	35	62.6	
Belbeis (Sharkia) ... ..	3,114	1,149	37	
Inshas (Sharkia) ... ..	19	8	42	
Abu Kebir (Sharkia) ... ..	422	119	28.19	
Toukh (Kaliubia) ... ..	100	10	10	
<b>TOTAL LOWER EGYPT ...</b>	<b>4,226</b>	<b>1,393</b>	<b>32.9</b>	
Giza (Giza) ... ..	3	—	—	
Fayoum (Fayoum) ... ..	4	—	—	
Abshaway (Fayoum) ... ..	610	114	18.6	
Qena (Qena) ... ..	2	2	100	
Aswan (Aswan) ... ..	1	1	100	
Baharia Oasis (Southern. Desert)	45	—	—	
<b>TOTAL UPPER EGYPT ...</b>	<b>665</b>	<b>117</b>	<b>17.5</b>	



TABLE No. 111 — SHOWING MALARIA AND ENLARGEMENT OF THE SPLEEN  
IN UPPER AND LOWER EGYPT DURING 1948.

Province or Governorate	Name of Station	Persons not infected with malaria			Persons infected with benign. T.			Persons infected with Malignant. T. Malaria		
		No	Positive	Rate percent	No	Posit.	Rate Percent	No	Posit.	Rate Percent
Canal ... ..	Suez ...	102	6	5.8	—	—	—	—	—	—
Western Desert ...	Baharia Oasis ...	430	200	50.11	514	130	40.4	12	12	100
	Wadi El Natroun	51	1	2.	13	10	77.	7	5	70
Behera... ..	Idku ...	4,536	286	6.3	1,486	25	1.7	2	—	—
Sharkia ... ..	Abu Kebir	484	86	17.7	529	287	52.2	—	—	—

TABLE No. 112.— DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND THE CANAL GOVERNORATE DURING THE YEAR 1948

Province or Governorate	Total of Specimens	Total of Positive Cases	%	Benign Tertian				Malignant Tertian				Quartan Malaria				Remarks
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%	
Canal ... ..	1,683	129	7.6	102	68	34	79.06	27	13	14	20.9	—	—	—	—	
Western Desert...	2,623	546	20.8	527	5	522	96.5	19	2	17	3.4	—	—	—	—	
Behera...	7,780	2,075	26.7	2,073	58	2,015	99.9	2	—	2	0.09	—	—	—	—	
Gharbia ... ..	14,336	7,225	50.3	6,036	2,212	3,824	83.5	1,169	278	911	16.4	—	—	—	—	
Menoufia ... ..	2,219	227	10.2	223	62	161	98.2	4	—	4	1.7	—	—	—	—	
Dakah'ia ... ..	10,740	3,803	35.4	3,735	1,523	2,212	98.2	68	22	46	1.7	—	—	—	—	
Sharkia ... ..	10,898	4,409	40.4	4,156	2,019	2,140	94.2	253	69	184	5.7	—	—	—	—	
Kaliubia ... ..	3,878	1,320	34.03	1,239	704	535	93.8	81	31	50	6.1	—	—	—	—	
Total ... ..	54,157	19,734	36.5	18,091	6,648	11,443	91.7	1,643	415	1,228	8.3	—	—	—	—	

TABLE No. 113.— DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE DURING 1948

Province or Governorate	Total of Specimens	Total of Positive Cases	%	Benign Tertian			Malignant Tertian			Quartan Malaria			Remarks		
				No.	New	Relapses	No.	New	Relapses	No.	New	Relapses			
														%	%
Giza ... ..	2,153	562	25.10	517	—	517	91.5	45	—	45	8.	—	—	—	
Fayoum ... ..	7,601	1,798	23.6	1,708	91	1,617	94.9	89	2	87	4.9	1	—	1	0.05
Beni Suef ... ..	391	20	5.11	3	2	1	15	17	7	10	85.0	—	—	—	
Minia ... ..	1 046	75	7 17	74	1	73	98.6	1	—	1	1.3	—	—	—	
Assiut ... ..	104	—	—	—	—	—	—	—	—	—	—	—	—	—	
Gerga ... ..	352	20	5.6	20	—	20	100	—	—	—	—	—	—	—	
Qena ... ..	5,802	131	2.25	125	1	124	95.4	6	—	6	4.5	—	—	—	
Aswan ... ..	3,191	481	15.07	480	—	480	99.9	1	—	1	0.20	—	—	—	
Dakhla Oasis ... ..	1,862	5	0.27	4	—	4	80	1	—	1	20.	—	—	—	
Kharga „ ... ..	1,284	32	2 48	32	—	32	100	—	—	—	—	—	—	—	
Total ... ..	23,786	3,124	13.1	2,963	95	2,868	94.8	160	9	151	5.12	1	—	1	0.03



TABLE No. 114.— MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND THE CANAL  
AND WESTERN DESERT GOVERNORATES DURING 1948

Months	Total of Specimens	Total of Positive Cases	%	BENIGN TERTIAN				MALIGNANT TERTIAN				REMARKS
				No.	New	Relapses	%	No.	New	Relapses	%	
January ... ..	1,999	333	16.06	269	71	198	13.4	64	2	32	3	
February... ..	1,108	225	20.3	196	31	165	17.6	29	5	24	2.7	
March ... ..	1,718	365	21.1	333	93	240	19.3	32	2	30	1.8	
April ... ..	3,350	980	29.2	930	211	719	27.7	50	2	48	1.5	
May ... ..	4,958	1,796	36.2	1,712	458	1,254	34.5	84	1	83	1.7	
June ... ..	5,329	2,287	42.8	2,150	830	1,320	40.3	137	3	134	2.5	
July ... ..	5,843	2,182	37.3	2,071	837	1,234	35.4	111	12	99	1.9	
August ... ..	10,121	3,988	39.4	3,695	1,694	2,001	36.6	293	70	223	2.8	
September ... ..	10,202	4,248	41.6	3,922	1,712	2,201	38.4	326	127	199	3.2	
October ... ..	4,432	1,669	37.6	1,430	487	943	32.2	239	92	147	5.4	
November ... ..	2,733	1,018	37.2	838	137	701	20.6	180	51	129	6.6	
December ... ..	2,364	643	27.2	545	78	467	23	98	18	80	4.2	
<b>TOTAL ... ..</b>	<b>24,157</b>	<b>19,734</b>	<b>36.5</b>	<b>18,091</b>	<b>6,648</b>	<b>11,443</b>	<b>33.4</b>	<b>1,643</b>	<b>415</b>	<b>1,228</b>	<b>3.1</b>	

TABLE NO. 115— MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE DURING THE YEAR 1948

Months	Total of Specimens	Total of Positive Cases	%	Benign Tertian				Malignant Tertian				Quartan Malaria				Remarks
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%	
January ... ..	2,671	168	6.2	163	—	163	6.1	5	—	5	0.1	—	—	—	—	
February ... ..	970	55	6.6	63	1	62	6.4	2	—	2	0.2	—	—	—	—	
March ... ..	1,185	77	6.4	76	—	76	6.4	1	—	1	0.008	—	—	—	—	
April ... ..	1,496	186	12.4	183	6	177	12.2	3	—	3	0.2	—	—	—	—	
May ... ..	1,899	335	17.5	330	11	319	17.3	5	—	5	0.2	—	—	—	—	
June ... ..	2,585	448	17.3	438	20	418	16.9	10	—	10	0.3	—	—	—	—	
July ... ..	1,858	318	17.1	311	30	281	16.7	7	—	7	0.4	—	—	—	—	
August ... ..	2,382	375	15.6	367	13	354	15.2	8	—	8	0.3	—	—	—	—	
September ... ..	3,167	504	15.5	480	9	471	15.1	24	1	23	0.7	—	—	—	—	
October ... ..	2,307	276	11.9	222	5	217	9.6	54	7	47	2.3	—	—	—	—	
November ... ..	1,869	234	12.5	208	—	208	11.1	25	1	24	1.3	1	—	1	0.05	
December ... ..	1,397	138	9.7	122	—	122	8.7	16	—	16	1.1	—	—	—	—	
TOTAL ... ..	23,786	3,124	13.1	2,963	95	2,868	12.4	160	9	151	0.6	1	—	1	0.00	



**TABLE No. 116 - NUMBER OF MALARIA CASES AND DEATHS  
NOTIFIED DURING THE YEARS 1947 AND 1948**

PROVINCE OR GOVERNORATE	New Cases						Relapses 1948	
	1947		1948		Difference		Cases	Deaths
	Cases	Deaths	Cases	Deaths	Cases	Deaths		
Cairo ... ..	434	7	546	4	+ 112	— 3	17	—
Alexandria ... ..	209	5	241	1	+ 32	— 4	—	—
Other Governorates	443	1	529	1	+ 86	— 0	36	—
Behera Province ...	2,659	2	679	0	— 1,980	— 2	1	—
Dakahlia „ ...	126	0	209	0	+ 83	— 0	7	—
Gharbia „ ...	970	3	224	3	— 746	— 0	1	—
Menoufia „ ...	73	0	45	1	— 28	+ 1	6	—
Sharkia „ ...	473	6	478	4	+ 5	— 2	—	—
Kaliubia „ ...	714	2	1,068	1	+ 354	— 1	4	—
Giza „ ...	100	2	105	0	+ 5	— 2	—	—
Fayoum „ ...	361	2	120	1	— 241	— 1	1,398	—
Beni-Suef „ ...	10	0	26	1	+ 16	+ 1	1	—
Minia „ ...	49	0	126	0	+ 77	— 0	—	—
Assiut „ ...	5	0	10	0	+ 5	— 0	—	—
Gerga „ ...	20	0	2	1	— 18	+ 1	—	—
Qena „ ...	5	0	7	3	+ 2	+ 3	2	—
Aswan „ ...	96	0	29	2	— 67	+ 2	3	—
<b>TOTAL ... ..</b>	<b>6,747</b>	<b>32</b>	<b>4,444</b>	<b>23</b>	<b>— 2,303</b>	<b>— 9</b>	<b>1,494</b>	<b>—</b>

TABLE No. 117.—SHOWING NO. OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING EITHER LARVAE OF ANOPHELES, OR CULEX PAPIENS IN LOWER EGYPT AND CANAL AND SUEZ GOVERNORATES DURING THE YEAR 1948

Province or Governorate	Malaria Station	No. of Villages surveyed	No. of Birkas examined	Larvae infested birkas		Birkas harbouring Anopheles Larvae				Birkas Harboursing Culex Pipiens					
				No.	Rate %	Phar.		Multicolor		Sergenti		Other Species			
						No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %		
Canal ... ..	Ismailia ... ..	9	1,400	223	15·	56	4	3	2	4	2	4	2	156	11
	Suez ... ..	4	50	2	4·	2	4	—	—	—	—	—	—	—	—
Western Desert... ..	Siwa ... ..	1	7	7	100	—	—	7	100	—	—	—	—	—	—
	Kafr el Dawar ... ..	2	3	—	—	—	—	—	—	—	—	—	—	—	—
Behera ... ..	Damanhour ... ..	38	95	29	30	27	28	—	—	1	1	1	1	—	—
	Kafr el Sbeikh ... ..	2	2	2	100	—	—	—	—	—	—	1	50	—	—
Gharbia ... ..	Mehalla el Kobra ... ..	11	20	8	40	—	—	—	—	—	—	8	40	—	—
	Faraskour ... ..	5	7	—	—	—	—	—	—	—	—	—	—	—	—
Dakahlia ... ..	Dekernis ... ..	8	13	4	30	—	—	—	—	—	—	4	30	—	—
	Belbeis ... ..	3	22	22	100	21	95	—	—	—	—	1	4·5	—	—
Sharkia ... ..	Inshas ... ..	4	13	11	85	8	61	—	—	—	—	3	23	—	—
	Abu Kebir ... ..	3	7	6	85	5	71	1	14	—	—	—	—	—	—
Menoufia ... ..	Shebin el Kom ... ..	6	20	20	100	20	100	—	—	—	—	—	—	—	—
	Toukh ... ..	31	65	48	73	42	64	6	9	—	—	—	—	—	—
Kaliubia ... ..	TOTAL ... ..	127	1,724	382	22	182	10	17	0·9	5	0·2	22	1	156	9



TABLE No. 118.—No. of Villages Surveyed and Birkas Found Harboursing either Larvae of Anopheles, or Culex Pipiens in Upper Egypt during the Year 1948

Province or Governorate	Malaria Station										No. of Villages surveyed	No. of Birkas examined	Larvae Infested Birkas		Birkas Harboursing Anopheles Larvae				Birkas Harboursing Culex Pipiens			
													No.	%	Pharoensis.		Multicolor.		Other Species		No.	%
															No.	%	No.	%	No.	%		
Giza...	...	...	...	...	...	...	...	...	...	31	109	79	72	33	30	—	—	52	48			
Beni Suef	...	...	...	...	...	...	...	...	...	6	8	8	100	1	12	—	—	7	87			
Minia	...	...	...	...	...	...	...	...	...	10	20	11	55	4	20	—	7	—	—			
Assiut	...	...	...	...	...	...	...	...	...	12	82	55	67	55	67	2	4.2	—	—			
	...	...	...	...	...	...	...	...	...	58	4	4	100	4	100	—	—	—	—			
Qena	...	...	...	...	...	...	...	...	...	7	—	—	—	—	—	—	—	—	—			
	...	...	...	...	...	...	...	...	...	7	200	13	65	13	6.5	1	0.5	—	—			
Aswan	...	...	...	...	...	...	...	...	...	2	10	8	80	—	—	8	80	—	—			
										133	433	178	41	110	25	11	2	7	1.6			
																			13			

**TABLE No. 119. — QUANTITIES OF LARVICIDES CONSUMED DURING  
THE YEAR 1948 IN LOWER AND UPPER EGYPT**

District	Province or Governorate	Station	Quantities Consumed				
			Pure DDT Kilograms	DDT and Ke- rosene Kgs	DDT and Ma- lariol Kgs	Paris Green Kgs	Mazut Kgs
Lower Egypt	Canal ... }	Ismailia... ..	—	—	—	1,793,776	—
		Suez ... ..	6,500	—	—	2,065,900	—
	Western Desert ... }	Siwa ... ..	—	—	—	164,740	—
		Baharia Oasis	—	—	—	120,934	—
	Behera .. }	Idku ... ..	—	—	—	1,469,903	800
		Kafr el Dawar	41,500	—	—	196,663	322
		Damanhour ...	—	2,977,600	—	680,740	—
	Gharbia... }	Fowa ... ..	7,500	—	—	189,000	—
		Kafr El Sheikh	56,500	—	—	139,500	—
		Biala ... ..	—	72,000	—	495,729	—
		Dessouk ... ..	—	15,165,000	—	646,204	—
		Mehalla Kobra	—	432,000	—	168,830	—
	Dakahlia }	Faraskour ...	—	2,892,100	—	699,955	—
		Dekernis ...	—	2,993,000	—	945,168	—
	Sharkia }	Belbeis ... ..	—	504,000	—	1,320,160	—
		Inshas ... ..	—	119,500	—	868,020	—
		Abu Kebir ...	—	4,275,000	4,000	681,000	—
	Menoufia	Shebin El Kom	—	6,435,000	—	206,000	—
	Kaliubia ...	Tonkh ... ..	—	2,477,985	—	2,315,525	—
		<b>TOTAL ...</b>	<b>112,000</b>	<b>38,343,185</b>	<b>4,000</b>	<b>15,147,774</b>	<b>1,122</b>
Upper Egypt	Giza ... ..	Giza ... ..	25,680,000	—	113,300,000	—	—
	Beni Suef...	Beni Suef ...	135,775	—	—	401,600	735,000
	Minia... ..	Minia ... ..	—	927,000	—	2,586,740	—
	Assiut ...	Assiut ... ..	—	4,230,000 3,375,000	— —	470,100	—
	Gerga ... }	Sohag ... ..	—	—	—	380,610	—
		Gerga ... ..	121,680	—	—	391,600	—
	Qena ... }	Nag Hamadi	—	2,515,500	—	1,271,000	—
		Qena ... ..	267,587	2,220,000	—	263,000	108,050
		Luxor ... ..	—	1,161,000	—	511,000	5,540,000
		Matana ... ..	—	324,000	—	379,760	—
	Aswan ... }	Kom Ombo ...	—	1,215,000	—	1,741,620	—
		Idfu ... ..	—	3,600,000	—	606,000	—
		Aswan ... ..	—	7,228,000	—	1,372,600	—
		<b>TOTAL ...</b>	<b>26,205,042</b>	<b>26,795,500</b>	<b>113,300,000</b>	<b>10,375,530</b>	<b>6,383,050</b>



TABLE NO. 120— NUMBER OF WARNINGS AND P.VS OF CENTRAVENTION DRAWN  
UP BY MALARIA UNITS AND THEIR BRANCHES IN UPPER AND LOWER EGYPT, THE  
CANAL ZONE AND FRONTIER DISTRICTS DURING 1948

Province or Governorate	Unit	Burrowpits or Puddles		Filling in or covering over disused wells or Sakias and Abolishing pumps		Clearing Drains or Miskas		Clearing Ponds or Marshes		Prohibition of Rice and Sugar cane Cultivations	
		Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs
Canal ... ..	Ismailia ... ..	—	—	4	—	81	14	—	—	—	—
	Suez... ..	—	—	1	—	19	—	—	—	—	—
Western Deser	W. El Natroun	—	—	—	—	—	—	—	—	—	—
	Siwa ... ..	—	—	—	—	—	—	—	—	—	—
	Baharia Oasis	—	—	—	—	24	—	—	—	—	248
Behera ... ..	Kafr el Dawar	—	—	—	—	—	—	—	—	—	—
	Idku ... ..	31	—	—	—	—	—	—	—	—	—
	Damanheur	—	—	—	—	116	—	—	—	—	66
Gharbia ... ..	Dessouk ... ..	—	—	—	—	—	—	—	—	—	—
	Fowa ... ..	—	—	—	—	—	—	—	—	—	—
	Kafr el Sheikh	—	—	—	—	—	—	—	—	—	—
	Biala ... ..	—	—	—	—	—	—	—	—	—	—
	Mehalla Kobra	—	—	—	—	—	—	—	—	—	44
Menoufia...	Shebin el Kom	14	—	1	—	—	—	—	—	—	—
Sharkia ... ..	Belbeis ... ..	—	—	—	—	—	—	—	—	—	25
	Inshas ... ..	—	—	—	—	—	—	—	—	—	—
	Abu Kebir ...	—	—	—	—	—	—	—	—	—	—
Dakahlia ...	Faraskour ...	—	—	9	—	11	5	—	—	—	—
	Dekernis ...	—	—	—	—	—	—	—	—	—	—
Kaliubia ...	Toukh ... ..	—	—	5	3	—	—	—	—	—	4
TOTAL LOWER EGYPT ...		45	—	20	3	251	19	—	—	—	387
Giza... ..	Giza ... ..	—	1	26	10	—	—	—	—	—	—
	Fayoum ... ..	—	—	—	—	—	—	—	—	—	—
	Beni-Suef ...	5	1	2	1	4	4	20	—	—	—
	Minia ... ..	—	—	1	—	31	—	—	—	—	—
	Qena ... ..	2	—	16	—	—	—	—	—	—	—
	Aswan ... ..	—	—	1	—	—	—	—	—	—	—
TOTAL UPPER EGYPT ...		7	2	46	11	35	4	20	—	—	—
GRAND TOTAL ... ..		52	2	66	14	286	23	20	—	—	387

**TABLE No. 121—DETAILS OF BIRKAS CONTRACTED FOR FILLING  
IN DURING THE FISCAL YEAR 1948—1949.**

Province or Gover- norate	Markaz	Locality	No. of birkas	Approximate Area			Volume in Cubic metres	Cost	
				Fed.	Kirat	Sahm		L.E.	Mill.
Behera	Teh El Baroud	Nekla El Enab.	4	13	7	4	67,000	9,581	—
	„ „	El Dahria	3	5	3	—	31,000	4,433	—
	Damanhour	Dosens	4	10	13	2	37,000	5,291	—
	Kafr El Dawar	Bardala	2	3	12	12	14,000	2,100	—
		<b>TOTAL ...</b>	<b>13</b>	<b>32</b>	<b>11</b>	<b>19</b>	<b>149,000</b>	<b>21,405</b>	<b>—</b>
Gharbia	Kafr El Zayat	Genah	6	28	8	22	145,000	23,055	—
	„ „	Kelit Ibiar	3	8	6	—	45,000	7,155	—
	Santa	Gafaria	4	4	8	5	30,000	4,770	—
	„	Mit Yazid	5	10	15	6	50,000	7,950	—
	Talkha	Nabrouh	3	1	6	21	6,000	954	—
	Mehalla El Kobra	Mehalet AbuAly	16	22	6	21	100,000	21,800	—
		<b>TOTAL ...</b>	<b>37</b>	<b>75</b>	<b>4</b>	<b>3</b>	<b>376,000</b>	<b>65,684</b>	<b>—</b>
Dakahlia	Mansoura	Selka & Bahkera	7	15	2	—	86,000	10,320	—
	„	Nesimea	3	15	1	—	35,000	5,950	—
	„	Malha	1	3	10	—	9,000	1,530	—
	Mit Ghamr	Hasfa	8	16	22	15	110,000	18,150	—
	„	Sahragt Kobra	4	20	17	3	700,00	9,800	—
	Aga	Tanamel	4	14	1	—	95,000	12,635	—
	„	Sahragt Soghra	8	20	23	—	125,000	16,625	—
	Faraskour	Ezbet el Borg	13	15	9	—	36,000	6,120	—
	Dekernis	Derab El Khadr	2	12	7	—	47,000	7,990	—
		<b>TOTAL ...</b>	<b>50</b>	<b>133</b>	<b>20</b>	<b>18</b>	<b>613,000</b>	<b>89,120</b>	<b>—</b>
Sharkia	Minia El Kamh	Senhout	8	12	8	18	70,000	6,230	—
	„	Abu Tawila	6	3	7	—	15,000	2,400	—
	„	Kerwida	1	—	20	—	3,500	560	—
	„	El Sadieen	5	8	18	12	55,000	8,800	—
	„	Shobra El Enab	5	8	16	—	55,000	8,800	—
	„	El Magazir	1	6	22	14	24,000	3,840	—
	Hehya	Manzal Hayan	1	1	17	10	9,000	1,440	—
	AbuHamad	El Helmia	5	2	17	16	8,000	1,280	—
		<b>TOTAL ...</b>	<b>34</b>	<b>45</b>	<b>7</b>	<b>22</b>	<b>239,500</b>	<b>33,350</b>	<b>—</b>
Kaliubia	Toukh	Toukh	3	11	17	—	80,000	12,560	—
	Shebin El	Shebin El							
	Kanatir	Kanatir	3	6	17	—	13,000	2,119	—
	Kaliub	Tanan	3	3	20	—	15,000	2,550	—
	„	The Barrage	2	1	12	4	2,500	500	—
	„	Kom Ashkin	2	4	2	—	18,000	2,880	—
		<b>TOTAL ...</b>	<b>13</b>	<b>27</b>	<b>20</b>	<b>4</b>	<b>128,500</b>	<b>20,609</b>	<b>—</b>



TABLE No. 121 (contd.)

Province or Gover- norate	Markaz	Locality	No. of birkas	Approximate Area			Volume in Cubic metres	Cost	
				Fed.	Kirat	Sahm		L.E.	Mill
Menoufia	Tala	Kafr Rabi	7	2	31	20	10,000	1,477	500
	"	Kom Mazen	7	6	9	20	63,000	9,308	250
	Shohada	Zawiat El Naoura	2	2	17	6	18,000	2,659	500
	Shebin	Shanawan	15	15	17	11	78,000	11,524	500
	El Kom	Mesilhia	5	9	14	—	48,000	6,808	670
	Quesna	Om Khanan	4	5	10	18	41,000	6,057	750
	"	Mit El Hafin	7	5	—	19	32,000	4,539	110
	"	Kafr Abu Zekri	1	3	6	—	19,000	2,695	093
	Menouf	Serounit	9	6	6	17	42,000	6,205	500
	Ashmoun	Seman	5	6	3	10	32,000	4,728	000
	"	Korgi	1	2	6	6	15,000	2,216	250
	"	Kafr Korgi	1	3	22	17	14,000	2,068	500
		TOTAL ...	64	69	17	—	412000	60,288	623
Giza	Giza	El Giza	1	1	2	10	2,000	276	—
	Imbata	Nahya	4	9	17	16	30,000	4,140	—
	"	Menshat el Bakari	14	27	17	20	95,000	13,140	—
	"	Mansouria	7	13	22	—	59,000	8,142	—
	"	Kafr Hakim	5	14	20	—	50,000	6,900	—
	"	Saft El Laban	7	2	4	11	8,000	1,104	—
	Ayyat	El Berghouti	2	13	9	—	132,000	18,216	—
		TOTAL ...	41	82	21	9	376,000	51,888	—
Beni Suef	Beni Suef	TezmintSharkia	8	3	4	23	9,000	1,521	—
	Biba	El Diaana	4	3	7	3	115,000	1,943	500
	"	Dashasha	2	15	6	—	70,000	11,820	—
		TOTAL ...	14	21	18	2	194,000	15,294	500
Fayoum	Fayoum	Dar Ramad	2	3	10	—	15,000	2,857	680
	"	MenshahFouad	1	3	6	8	34,000	3,958	416
	"	Mandara	1	—	5	14	1,000	179	928
	Sennouris	Nakalifa	4	4	21	9	15,000	2,222	640
	Itsa	El Minia	6	1	10	1	5,000	920	808
		TOTAL ...	14	13	5	8	70,000	101,390	472
Minia	Minia	Damshir	5	6	8	—	40,000	6,680	—
	"	Zawa Beni Ibrh.	16	7	13	—	38,000	6,346	—
	Abu Kirkas	Abu Kirkas	5	8	—	—	30,000	5,010	—
		TOTAL ...	26	21	21	—	108,000	18,036	—
Assiut	Mallawi	Mellawi	8	8	8	12	39,000	9,477	—
	Manfalout	El Hawatka	15	10	15	10	55,000	13,365	—
	Abnoub	Abnoub & Beni Zerah	13	8	14	12	80,000	19,440	—
	"	El Kasr	13	3	19	1	30,000	7,290	—
		TOTAL ...	49	31	9	11	204,000	49,572	—
Gerga	Tahta	Tahta	2	7	1	5	25,000	6,100	—
	Akhmim	El Sawana Shark	7	1	16	3	6,000	1,140	—
		TOTAL ...	9	8	17	8	31,000	7,240	—
Qena	Qena	Qena	12	6	16	5	26,000	7,800	—
	Abu Tisht	Abu Tisht	3	3	13	10	12,000	3,360	—
	Nag Ham.	Farshout	2	3	4	—	6,000	1,800	—
		TOTAL	17	13	9	15	44,000	12,960	—
		GRAND TOTAL	381	577	15	23	2841500	455,586	595

TABLE No. 122.—BIRKAS FILLED IN BY THE INHABITANTS DURING 1948 UNDER MILITARY ORDER No. 363  
ISSUED ON 19/1/48.

Province or Governorate	Station	Locality	No of birkas	Approximate Area			Remarks
				Fedds,	Kirat	Sahm.	
Canal ...	Ismailia ...	Ismailia ...					
	„ ...	Abu Sultan ...					
	„ ...	Nafisha ...					
	Suez... ..	Suez... ..	4	4	3	—	
	„ ...	Shalloufa ...					
Sharkia ...	Abu Kebir ...	Abu Kebir ...	5	5	8	—	
Beni Suef ...	Beni Suef ...	Beni Suef ...	7	3	16	7	
Minia ...	Minia ...	Minia ...	10	19	9	12	

TABLE No. 123.— RESULTS OF BLOOD SPECIMENS EXAMINED FOR FILARIA  
BY RESEARCH INSTITUTE DURING 1948

Province or Governorate	Locality	No of Specimens	Returned Positive	Remarks
Behera ...	Rosetta ...	12,380	755	
Cairo Research Institute ...	In-patient ...	89	20	
	Out-patient ...	10	1	
	TOTAL ...	12,479	776	



## Chapter XVIII.—Insects Eradication

### INTRODUCTION :

The eradication of the exotic species of *A. gambiae* from Egypt (1945) and Brazil (1940) encouraged the Egyptian Government in cooperation with the Rockefeller Foundation to try the eradication of the indigenous species of *Anopheles*. The Dakhla and Kharga Oases furnished a suitable place for the experiment as they are highly malarious and fairly well isolated.

#### 1.—General Description :

The Kharga Oasis is 200 kms. to the South West of the Nile Valley (lat. 24°30'–25° N., long. 30° 30' E. Green.) opposite Luxor and Kom-Ombo cities; the Dakhla is another 200 kms. to the West of Kharga (lat. 25° 30' N., long. 28° 30'—29° 30' E. Green.). The population and area are given below :

TABLE NO. 124

Oasis	Population	Total Area	Cultivated land	Rice Area
Kharga ... ..	11,000	2,800 sq. kms	5,000 acres	800 acres
Dakhla ... ..	21,000	2,600 ,,	10,000 ,,	3,700
<b>TOTAL ... ..</b>	<b>32,000</b>	<b>5,400 ,,</b>	<b>15,000 ,,</b>	<b>4,500</b>

The water supply is from artesian wells which number about 1200 with an average depth of 800–1600 feet. The cultivation is sparsely distributed according to the position of the wells at a length of about 120 kms. in Kharga and 80 kms. in Dakhla. The main crops are dates, rice, wheat and citrious fruits. The roads are very hard and bumpy with sand dunes intervening. The number of houses is about 9300.

#### II.—MALARIA SURVEY :

Before starting the campaign a preliminary malaria survey done in October 1945 gives the following results :

##### A.—Parasite and Spleen indices :

TABLE NO. 125

Oasis	Films Exam.	Posit.	%	B.T.	M.T.	Spleen	%
Kharga ... ..	501	32	6.3	24	8	104	20.5
Dakhla ... ..	961	141	20.6	70	71	427	61.7
<b>TOTAL ... ..</b>	<b>1,462</b>	<b>173</b>	<b>11.7</b>	<b>94</b>	<b>79</b>	<b>531</b>	<b>36.3</b>

The spleen rate loses much of its value in the Oases as Bilharzia is rather common especially at Dakhla.

##### B.—Anopheline indices :

1.—*Anopheles* larvae.—The unit of larval search is 5 square or linear metres

TABLE NO. 126

Oasis	Units searched	Posit.	%	A. Serg.	A. Phar.	A. Mult.	A. D'thali
Kharga ... ..	4,368	696	11.4	66.7	27.5	5.4	0.4
Dakhla ... ..	2,916	484	16.6	69.5	26.5	1.0	2.7

2.—*Anopheles adults*.—The unit of imaginal search is the house.

TABLE No. 127

Oasis	Houses searched	Posit.	%	A. Serg.	A. Phar.	A. Multi.	A. D'thali
Kharga ... ..	417	254	60·9	87·7	12·3	0·3	—
Dakhla ... ..	968	959	99·0	80·0	13·5	5·5	—

Thus it appears that the indigenous Anophelines of the Oases are 4 : *A. sergenti*, *A. pharoensis*, *A. multicolor* and *A. D'thali* of which *A. sergenti* is the most abundant and *A. D'thali* the rarest. It is known as well that *A. sergenti* is a more efficient malaria vector than *A. pharoensis* while the other two have not been proved to transmit malaria in nature.

III.—ORGANIZATION :

The campaign was started in January 1946 aiming at the eradication of all the 4 anopheline species. This work comprises three phases :

- 1.—Control work.
- 2.—Survey work.
- 3.—Test for eradication.

1.—*Control Work* :

This is done by treating all the potential breeding places as actual breeding places on a weekly cycle for a reasonable length of time until no larvae or adults are found.

This is attained by dividing the whole area of work into zones. The zone is the unit of area of breeding places that can be covered once weekly by one man “the *molabiz*” or overseer. It is evident that if the *molabiz* does his work properly and the zone is of such size as to be covered by him once weekly all the larvae must die if the larvicide used is potent enough. It is thus apparent that there is no production of any new generation and the residual adults will die in time and then the eradication is complete unless new infestation occurs.

Therefore the zone, the *molabiz* and the larvicide are the keystone of eradication and all the rest of the organisation is meant to keep them working with full capacity and co-ordination. Each four to six zones form a district “*magmouah*” supervised by a foreman or “*morakib*” whose work is to control the size of the zone and number of overseers according to changes in the size and number of potential breeding places. Also he trains the overseer, sets his itinerary, checks his work by both visiting him at least once weekly and searching for larvae in the previously larvicided place. Besides, he supplies the overseers with larvicide and equipment, checks the daily and weekly forms. Each few districts form a post with its chief and assistants, transport and stores and each few posts form a division.

The Kharga division comprises three posts : Kharga and Dakhla A and B with 17 districts and 71 zones :

TABLE No. 128

	Districts	Zone
Kharga Post : (Doctor and 3 assistants.) ...	8	29
Dakhla A. : (Engineer and 3 assistants.) ...	4	20
Dakhla B. : (Engineer and 3 assistants.) ...	5	22
	17	71



The number of overseers depends upon the size of breeding places in the zone and varies with the season. Thus in January and February when evaporation and cultivation are at a minimum, and seepage and surface water are maximum, the number of overseers is greater than that of the zones. Starting from June till December, rice cultivation starts and the number of overseers is greatest. The boundaries of zones are frozen from the beginning of the campaign so that the statistical data are correct and in case their number need be changed subdivision is resorted to. The lowest number of overseers was 71 and the highest 285 during rice cultivation.

## 2.—Survey Work :

The larvicidal work of the *molahiz* (overseer) is the keystone of eradication and the checking of this work is all important for attaining that goal. The *molahiz* is first checked by his own form in which he records the details of his daily work. He is again checked by the foreman who is in constant touch with him. A third checking is done by the larvae and imago scouts ; this search for larvae and adults is carried out by an independent staff under the direct supervision of the chief of the post. The unit of the larval search is 5 linear or square metres and the unit for the adult survey is the house or the yard.

In searching for larvae and adults, the number of scouts attached to each post was few in the start of the campaign as there was no difficulty in finding larvae or adults. As the larvicidal work became more and more effective the scouts increased in number so that they cover the whole area under control in searching the few missed foci of breeding or hiding.

## MALARIA SURVEY DURING THE CAMPAIGN

### 1.—Parasite Rates :

TABLE No. 129

Year	Post	Films exam.	Posit.	%	B.T.	%	M.T.	%
1946... .. {	Kharga ... ..	2,532	208	6.2	202	8.0	6	0.2
	Dakhla ... ..	6,847	246	13.8	797	10.1	249	3.7
1947... .. {	Kharga ... ..	1,720	62	3.6	62	3.6	00	0.0
	Dakhla ... ..	3,639	39	1.1	25	0.7	14	0.4
1948... .. {	Kharga ... ..	1,372	32	2.3	32	2.3	00	0.0
	Dakhla ... ..	1,968	6	0.3	6	0.3	00	0.0

It may be noted that :

- (1) Dakhla is generally more malarious than Kharga.
- (2) B.T. is affected to a less degree than M.T. obviously due to its higher relapse rate.
- (3) The positive cases in Kharga in 1948 were all in January–March none during the rest of the year.
- (4) The 6 positive cases in Dakhla in 1948 were in September and October. The houses were spray painted with D.D.T. during August and September, 1948 and larvicidal work was discontinued since the 20th. of May, 1948.
- (5) The gradual diminution of the number of films examined is due to being taken from patients seeking treatment in the hospitals.

## 2.—*Anopheline Indices :*

### A.—*Larvae :*

TABLE No. 130

Year	Post	Scouts	Units searched	Posit.	A. serg.	A. phar.	A. multi.
1946... .. {	Kharga ... ..	8	343,671	1,141	994	51	96
	Dakhla ... ..	10	368,045	1,632	1,095	173	361
1947... .. {	Kharga ... ..	16	667,647	26	00	12	14
	Dakhla ... ..	41	2,063,700	961	00	948	13
1948... .. {	Kharga ... ..	22	773,578	16	00	00	1
	Dakhla ... ..	27	978,109	8,118	00	7,468	316

### B.—*Imago :*

TABLE No. 131

Year	Post	Scouts	Houses searched	Posit.	A. serg.	A. phar.	A. multi.
1946... .. {	Kharga ... ..	5	44,236	1,073	922	27	104
	Dakhla ... ..	6	63,317	3,223	2,526	50	647
1947... .. {	Kharga ... ..	6	67,471	49	4	19	26
	Dakhla ... ..	11	124,868	250	0	214	36
1948... .. {	Kharga ... ..	7	66,682	15	0	14	1
	Dakhla ... ..	8	76,539	4301	0	3,012	1,239

It will be noted from the two tables that :—

(1) The larval and house search activities are gradually increasing each year while the total number of positive collections is gradually diminishing.

(2) *A. sergenti* has disappeared by January 1947 as the 4 adults recorded in Kharga were caught at the beginning of the month from an isolated well where no control work was being done at that time.

(3) The increase in the number of positive collections of *A. pharoensis* and *A. multicolor* in Dakhla in 1947 and 1948 is due to stopping control work on two occasions in this post : during September and October 1947 and since May 1948 to test for the eradication of *A. sergenti* which never appeared while the other two species increased greatly.

### 3.—*Test for Eradication :*

The test of eradication is applied in the area after remaining free from both larvae and adults for a sufficiently long period. This test is to stop all control work while the survey work is intensified especially during the most favourable season for breeding of the eradicated species.

As the whole division was reported free from *A. sergenti* since January 1947 two districts from the Dakhla "A" post were put under test during September and October and 156,966 units were surveyed for larvae and 7,855 houses for adults with negative results.

In May 1948 all the 2 Dakhla posts were put under test by discontinuing all larvicidal work and searching for *A. sergenti*. 259,336 units were searched for larvae from May till December and 20182 houses were searched for adults and not a single *A. sergenti* was found. The other species of *A. pharoensis* and *A. multicolor* were found both in the imago and larval stages.



#### IV.—WORK DONE :

##### *The Larvicide :*

A 5% solution of DDT in solar oil was used for treating the breeding places by means of the ordinary hand flitgun at a rate of 0.2 cc. per square metre. About 494 tons of this solution were consumed during the 3 years of the campaign. Adulticidal work was reserved for the means of transport arriving at the Oases from the Nile Valley to prevent reinfestation and the adulticide used was a 0.1% pyrethrin in kerosene.

##### *Personnel :*

The number of the permanent staff who took part in this campaign is 27 including doctors, engineers, assistants, clerks and mechanics. The rest of the personnel were all daily paid and these include overseers, scouts and labourers. Their monthly average was 219 in 1946, 221 in 1947 and 101 in 1948. The cause of the great drop of the 1948 figure is the stoppage of control work in Dakhla.

##### *Transport :*

21 vehicles were working during the 3 years, of which 7 were completely used up and 2 only returned in good condition and the percentage of off road cars was respectively 37.5, 54.5, 52.6 in the three years of work which may give an idea about the hardness of the road.

##### *Expenditure :*

The money spent during the 3 years of the campaign averages to L.E. 66,000 most of which (L.E. 50,000) was labour wages. The number of different persons of the Oases who worked with the campaign (no matter about the period of work) is about 1600. All these persons were always males of the age group of 20–35 years which is 4152 approximately. Thus about L.E. 30 were handed to each of about 38.5% of the working class of the Oases which means an improvement of the social condition of the population.

#### V.—DISCUSSION :

##### 1.—*Difficulties encountered :*

- (1) Most important is the problem of transport.
- (2) Shortage of repair shops for tools, soldering and blacksmithery.
- (3) Difficulty of looking for probable missed breeding places, as the desert and hills are not well known by the people and the maps do not show all of them and even the well known places were beyond the reach of the available cars.
- (4) The people are not used to clearing their channels from algae and even properly watering their fields thus leaving much seepage, and also the continuous flow of the wells in some cases producing much unused water that was left to form wide sheets of surface water.
- (5) The difficulty of getting the appropriate number of literate people to train as scouts.
- (6) The difficulty of procuring living accommodation for the staff of the campaign added to the very hot summer that discourages a difficult job that needs almost continuous walking in the open desert.

##### 2.—*Failure of eradication of the other species :*

Eradication work is an "all or none" phenomenon so that it can only be achieved by killing a hundred per cent of the species concerned. The method used against the anophelines concerned was to kill all the larvae before they can complete the life cycle. This necessitates an attack of all the actual and potential breeding places of the different species and that all the larvae therein must be killed. Thus to arrive at the goal of eradication two important points must be achieved :

- 1.—A full knowledge and treatment of all the breeding places.
- 2.—Killing of all the larvae.



Now a study of the main breeding places of the 3 species dealt with will answer the question why did we succeed in the eradication of *A. sergenti* and fail with the other two.

*A. sergenti* breeds mainly in slowly moving streams, in canal with or without algae and in rice fields under certain conditions. Either in the small channel in the rice fields and at the edges where the water is slowly moving. It is also more or less domestic so that it enters houses and breeds not far from them, also during the search for adults many of them are killed in the houses by flitting. Thus it is apparent that the breeding places are easily found and are accessible to the hand flitgun overseer. *A. pharoensis* on the other hand breeds mainly inside rice fields which can never be covered perfectly by the overseer with the present means of spraying. Again it is more or less wild so that its absence from houses does not mean a negative result and a negative result for the larvae in rice fields cannot be depended upon as it is almost impossible to examine every puddle in a rice field without missing any.

*A. multicolor* breeds mainly in seepage in brackish puddles of water many of which are very small and even are only shining with water and where these are very much, they are easily missed by both the overseer and the scout. Also there may be some far fetched breeding foci in the wide desert which were missed.

### 3.—*Justification for the expenses :*

There remains one question to be answered. Do the results achieved amply justify the expenditure of such great funds of money? It is certainly so; for:

(1) After all, the money spent was mainly labour wages or in other words given to the dwellers of the Oases.

(2) The eradication of the main carrier of malaria *A. sergenti* will most probably keep the malaria incidence at the very low level found at present.

(3) Moreover the future development of these Oases and the prospective digging of many artesian wells to increase the land cultivation makes it a sound policy to eradicate the dangerous carrier before such land development schemes are started.

## VI.—RESULTS ACHIEVED

(1) Eradication of the main malaria vector in the Oases: *Anopheles Sergenti*.

(2) A great reduction of malaria.

(3) A general physical and economical improvement of the population.

(4) A practical training of the population on a well organised hard work.

### 1.—*The Faroukeya well at Dakhla :*

The biggest artesian well in the Oases dug by the Irrigation Department about 1940—supplies about 300 acres with plenty of water. A cement reservoir with special outlets is built around the mouth of the well. Average depth of the Dakhla wells is about 800 feet. Number of the flowing wells in Dakhla about 797.

### 2.—*Ain el Khalwa :*

Another Roman well at Kharga. The channel and the growing weeds at its edges meant to prevent the flowing of sand from neighbouring dunes. This is another very suitable place for *A. sergenti*, which was eradicated.

### 3.—*Rice Fields :*

Rice is among the main crops in the Oases. About 3,700 acres are cultivated in Dakhla and 800 in Kharga. Cultivation starts about the end of May and harvestation about the end of November. The rice field is the most preferable breeding place for *A. pharoensis*; where the field is sloping so that the water moves from one basin to the other, *A. sergenti* breeds.

### 4.—*Difficulties :*

The huge swamps with thick tall weeds sometimes with many puddles scattered irregularly were among the very difficult places to be larvicided. The Dinareya swamp at the Kasr village (Dakhla) is only one example of these swamps. This is suitable for breeding of *A. pharoensis*.



(5) *Control Work :*

The overseer holds his flitgun parallel to the surface of water and gives one stroke every two wide paces (appr. 2 metres), the first to one side; the next to the other. The average output of the flitgun at each stroke is about 0.4 cc., i.e. he gives about 0.2. cc. per square metre i.e. 0.01 grm. of D.D.T. or about 42 grams per acre (4,200 sq. metres).

(6) *The Larval Scout Searching Seepage :*

Note the puddles and the whitish crust of salt on them. There, *A. multicolor* breeds and larviciding of these places is difficult because the water in the puddle is sometimes overshadowed by the soil and also being irregularly distributed some are easily missed.

(7) *Imago Search :*

The room is examined by starting from one corner and going all round the ceiling. Shelves and windows are examined by keeping the sheet just outside it and irritating any resting mosquitoes by one stroke of the flitgun and while they are coming out a dense cloud of flit formed by repeated strokes of the flitgun will kill them rapidly so that they are received on the sheet.

SUMMARY OF THE WORK OF THE ERADICATION OF *A. SERGENTI* FROM THE KHARGA  
AND DAKHLA OASES TO THE END OF 1948

1. — *Larval Survey :*

TABLE NO. 132.

Year	Oasis	No. of units surveyed	No. of post. unite	+A. serg.	+A. phar.	A. multie.
1945... ..	Kharga ... ..	4,368	696	464	191	41
	Dakhla ... ..	2,916	484	336	128	20
1946... ..	Kharga ... ..	343,671	1,141	994	51	96
	Dakhla ... ..	368,045	1,632	1,095	173	361
1947... ..	Kharga ... ..	667,647	26	—	12	14
	Dakhla ... ..	2,063,700	961	—	948	13
1948... ..	Kharga ... ..	773,578	16	—	—	1
	Dakhla ... ..	978,109	8,118	—	7,468	316

2. — *Imago Survey :*

TABLE NO. 133.

Year	Oasis	No. of units surveyed	No. of post. houses	A. serg.	A, phar.	A. multi.
1945... ..	Kharga ... ..	417	254	223	30	1
	Dakhla ... ..	968	959	767	139	53
1946... ..	Kharga ... ..	44,236	1,073	922	27	104
	Dakhla ... ..	63,317	3,223	2,526	50	647
1947... ..	Kharga ... ..	67,417	49	4	19	26
	Dakhla ... ..	134,868	250	—	214	26
1948... ..	Kharga ... ..	66,682	15	—	14	1
	Dakhla ... ..	76,539	4,301	—	3,012	1,239

(1) The larval and imago survey carried out in 1945 was during 10 days in the month of October whereas the other surveys were carried out during the whole year.

(2) All control work was stopped at Dakhla oasis since May 1948 to test for Eradication till now.

All control work was stopped in Kharga oasis from February 1948 till now.

(3) Note that *A. sergenti* was not found since January 1947 till now in spite of stopping all control work. The other two species made their appearance gradually after stopping control work.

### III.—MALARIA CONDITION

TABLE No. 134

Year	Oasis	No. of blood films. Examined.	No. of positive	Percentage
1945 ... ..	Kharga ... ..	501	34	6.3
	Dakhla ... ..	961	141	20.6
1946... ..	Kharga ... ..	2,532	208	6.2
	Dakhla ... ..	6,847	246	13.8
1947 ... ..	Kharga ... ..	1,720	62	3.6
	Dakhla ... ..	3,639	39	1.1
1948 ... ..	Kharga ... ..	1,372	32	2.3
	Dakhla ... ..	1,968	6	0.3

#### Summary :

(1) *A. sergenti* — the most important vector — was eradicated. No *A. sergenti* was found even after stopping all control measures in Dakhla and Kharga oases for a whole year.

(2) Malaria conditions in both oases was greatly improved after the eradication of the main vector. Thus the percentage of malaria dropped from 12.2 per cent in 1945 to 0.8 per cent among the total population of 32,000.

(3) The total expenditure of the campaign was L.E. 70,000 during four years, of which L.E. 60,000 were spent as wages to local people of the two oases.



## Chapter XIX.—Bilharzia Snail Destruction

### 1.—Introduction:

The scope of the Bilharzia Snail Destruction Section at the beginning of 1948 is illustrated as follows :

TABLE No. 135.—TERRITORIES UNDER CONTROL IN 1947—1948

Date of opening	Province	Agricultural area in feddans *	Stream lengths in kms.	Maximum inf. lengths in kms.
1942 ... ..	Fayoum ... ..	360,000	33,000	5,000
1943 ... ..	Giza ... ..	250,000	6,500	3,000
1944 ... ..	Aswan ... ..	85,000	2,500	700
1945 ... ..	Qena ... ..	70,000	2,500	1,000
1946 ... ..	Kaliubia ... ..	250,000	8,000	3,700
1946 ... ..	Behera (1/3) ... ..	240,000	9,000	5,800
1947 ... ..	„ (additional 1/4) ...	180,000	10,000	6,000
1947 ... ..	Beni-Suef ... ..	200,000	6,500	3,500
TOTAL ... ..		1,635,000	78,000	28,700

\* One feddan = one acre = 4,200 m<sup>2</sup>.

The Oases of the Libyan desert, where work was begun in 1943 and 1945, contain about 200 scattered foci of snail infection.

The present program aims at the treatment, at least twice a year, of branch canals with over 10 snails per 100 dips. Drains are treated only when important, that is, when they are passing through or near villages, or when the snails are infected with Bilharziasis; main streams when possible. These limitations are due to a limited budget, very limited amounts of copper sulphate, and also to the impossibility of obtaining closure of main streams for sulphation on account of agricultural and other necessities, together with general difficulties of co-ordination with the Irrigation Department. Experience has also shown that it takes several years before the newer territories can be brought to the level of organization and control of the older provinces.

It must be fully understood that such control measures represent a temporary check only, and that they should be greatly intensified to obtain lasting results. However, a marked reduction of the snail population has been achieved in territories under control.

It should be noted that the term “negative” in our records, merely means that, upon survey, snails were not found. Percentages are only indicative.

### II.—Snail Control in Fayoum Province:

The majority of infested main streams could not be treated, as explained in former reports. By judicious use of resources in branch canals, it was possible to maintain the relatively low level of infestation of 15 per cent of surveyed lengths, corresponding to 3.7 per cent of their number, at the average rate of 14 *Bulinus* snails in 100 dips.

### III.—Snail Control in Giza Province:

Most main canals could be treated, and a comparison of the spring surveys of 1947 and 1948 showed that the lengths and numbers of infested canals and the intensity of *Bulinus* infestation had probably been halved, now amounting to 18 per cent of surveyed lengths or 8 per cent of their number, at the rate of 7 *Bulinus* in 100 dips. The number and lengths of infested drains was not reduced, as only those near roads or villages had been treated.



#### IV.—*Snail Control in the Oases :*

The Oases are watered by artesian springs, usually spilling into storage pools and feeding long, but narrow, irrigation channels, which contain *Bulinus truncatus* and *Limnaea cailliaudi*, the carriers of human bilharziasis and the liver fluke of cattle respectively.

(1) *Baharia Oasis*.—The 5 remaining wells infested with *Bulinus* were treated repeatedly until no *Bulinus* could be found in the spring of 1948. *Limnaea* infestation was reduced from 73 wells infested at the rate of 70 snails in 100 dips in 1947, to 29 wells with 21 snails in 100 dips in 1948.

(2) *Kharga Oasis*.—Ten new infestations with *Bulinus* and 42 with *Limnaea* were discovered, while most of the wells known as infested before were found free from snails. Sulphations in November 1947 reduced the total number of wells infested with *Bulinus* to 6 and those infested with *Limnaea* to 26, in the spring survey of 1948.

(3) *Dakhla Oasis*.—In this largest and most heavily infested Oasis, another 45 infestations, 17 of which with *Bulinus*, were detected in the course of the year. After sulphations, there remained, in the spring of 1948, 13 *Bulinus* and 65 *Limnaea* infestations.

#### V.—*Snail Control in Qena and Aswan Provinces :*

Both Provinces have been placed under a common inspectorate located in Luxor. The difficulties encountered in the treatment of the perennially irrigated areas are extreme, the water supply being barely sufficient, for agriculture, and the main feeders from the pumps never being available for sulphation. Most infested branch canals could be given one treatment of either clearance or sulphation, half of these could be given a second treatment. The drains are not included in the program. 200,000 palm leaves were used in surveying negative streams by dipping, and 17,500 *Bulinus* snails were removed. The assessment of the situation is difficult on account of the great fluctuation in the size and location of cultivated areas and, due to our inability to treat main feeders, re-population of branches is frequent. A certain reduction of infested lengths was obtained, especially in Edfu region, and a reduction to 1/3 of last year's intensity of snail infestation; in Qena province, in 1948, 33 per cent of the lengths surveyed, or 12 per cent of their number, were infested at the average rate of 11.5 *Bulinus* in 100 dips; in Aswan province, 19 per cent of the lengths surveyed, or 4.5 per cent of their number, at the rate of 8 snails in 100 dips.

#### VI.—*Snail Control in Kaliubia Province :*

The first year of work in the province presented great difficulties: staff, transportation, copper sulphate and other equipment being far below needs. The more important parts of the infested lengths were treated once, the sulphated lengths representing about 1/5 of the total infested; a small proportion were treated twice. Special attention was given to *Planorbis* infestation which, though heavy, is localized, and therefore easier to control. Results of this partial treatment were not unsatisfactory and infestation was reduced as compared to last year. In the spring survey of 1948, which included an additional 4,000 streams measuring 1,000 kms., 35 per cent of the lengths surveyed, or 13 per cent of their number, were found infested with snails. The intensity of infestation, in streams infested with either one or the other species of snails respectively, was 18 *Bulinus* and 30 *Planorbis* in 100 dips.

#### VII.—*Snail Control in Behera Province :*

During the initial period of establishment in southern Behera, we found not only the usual difficulties of organization, staffing and equipping, but also that of obtaining labour, which is absorbed practically all the year by the large number of private estates. The estates, by establishing extensive drainage, have also created an ideal habitat for *Planorbis*. Widespread cultivation of rice, and the flooding of fields until the water is flush with distributaries and small drains, especially facilitates snail propagation and restocking.

During the latter part of 1947, new territory, surrounding Damanshour and Mahmoudia towns, was surveyed, and it was found that incidence and distribution of snails as well as agricultural conditions were similar to those in southern Behera. About 55 per cent of the newly surveyed lengths were found infested at the average rate of 53 *Bulinus* and 106 *Planorbis* in 100 dips, the infestation with *Planorbis* being just as widespread as that with *Bulinus* in canals, and more so in drains, but considerably more intense in both cases.

The older and new territories were only given partial treatment.



### VIII.—*Snail Control in Beni Suef Province:*

The Province was divided into 3 divisions: (1) Bush, (2) Beni Suef, (3) Beba, and each of these into 7—8 areas. It is watered by Ibrahimia Canal and drained by Moheit drain, both of which come from the southern provinces and continue into Giza Province. 52 per cent of the lengths surveyed were infested with *Bulinus* at the average rate of 42 snails in 100 dips. The drains, which form but a small percentage of the streams, are more heavily infested, in certain areas up to 726 snails in 100 dips. The province contains numerous lakes and ponds, infested with snails.

### IX.—*The Laboratory:*

#### (1) *Examination of snails for bilharzial infection:*

Routine examinations in the Cairo laboratory of 125,224 snails from 338 localities, mainly from Giza but also from Kaliubia Provinces, showed an infection in 22 per cent of the samples in 0.7 per cent of the snails. *Mansoni* infection was higher and more frequent than *haematobia* infection. Snail examinations for Fayoum Province were made in Fayoum town. The location of infected samples were communicated to the staff of the areas for preferential treatment.

#### (2) *The action of various chemicals on bilharzial snails and aquatic weeds:*

A series of insecticides and aquatic weed killers in use abroad, were investigated to determine their action on bilharzial snails and on aquatic weeds under Egyptian conditions.

(a) *Benoclor 3C*, a chlorinated benzene combined with an emulsifying agent. This aquatic herbicide killed all snails, in vitro, at 30 ppm. in 10 hours; the same concentration in the presence of weeds killed them after 72 hours.

(b) *Aquacite*, similar in composition to *Benoclor 3C*. Lethal concentrations and killing time for both snails and weeds were higher than with *Benoclor*.

(c) *K-604*, *G-562*, *C-456*, *D-307*, dinitrophenol derivatives whose insecticidal action is based on metabolic stimulation. These compounds, all of low solubility, proved effective against snails and their eggs in mixtures of relatively low concentrations, *K 604*, in vitro, killing snails at 1 ppm. in 48 hours, at 5 ppm, in 24 hours. Since, however, their concentrates are toxic and improper disposal of residue left after application may lead to serious consequences, their use is not contemplated.

## Chepter XX.--Leprosy Control

Out of a total of 1916 persons presenting themselves to leprosy units during the year 897 were found leprous, as compared with 1474 and 799 respectively in the previous year. The remaining 1019 were found suffering from other diseases and were referred to the competent hospitals for treatment.

The following is the distribution of attendances according to leprosy units :

TABLE No. 136 .

Name of Unit	Number attending	Positives	Negatives
Abu Zaabal Colony ... ..	90	90	—
Amryia Leprosy Colony ... ..	97	97	—
Cairo Hospital ... ..	301	205	96
Zagazig Clinic ... ..	85	65	20
Suhag „ ... ..	162	99	63
Alexandria „ ... ..	137	57	80
Mansoura „ ... ..	99	68	31
Tanta „ ... ..	374	105	269
Shebin el Kom,, ... ..	518	58	460
Minia „ ... ..	15	15	—
Qena „ ... ..	38	38	—
TOTAL ... ..	1,916	897	1,019

Of the 897 persons returned leprous this year, 696 were recorded for the first time.

This brings the total persons examined for leprosy since leprosy control was organised until the end of this year to 29,511 of whom 14,453 were returned leprous. Of these 10,939 were recorded once and 3,514 repeatedly recorded.

At the end of this year, a total of 863 lepers were in segregation at Abu Zaabal and Amryia colonies, Cairo hospitals and segregation camps annexed to units. This is compared with 761 lepers in segregation at the end of 1947.

The ratio of patients' attendance for treatment was this year 21%.

### Treatment :

Hydnocarpus oil is used in the treatment of leprosy at the rate of one intramuscular injection each week. A total of 107,229 hydnocarpus injections weighing 481 kgs. of oil were administered this year as compared with 99,065 injections and 446 kgs. in the previous year.

A total of 171,181 dressings were applied this year as compared with 157,913 in 1947.

In addition to their leprosy treatment, lepers are also treated for other diseases from which they may be suffering.



## Abu Zaabal Colony:

### Admissions:

Of 210 lepers admitted to the colony this year, 90 were admitted for the first time and 120 were in segregation before, as compared with 169 admissions, 79 first segregation and 90 repeated segregation during the previous year. The total number of lepers in segregation at the end of the year was 455 as against 426 in the previous year.

### Technical Works:

Of the 90 new lepers, 57 were of the neurotic type, 4 of the dermal, and 29 of the mixed type.

Examination of the 120 re-isolated lepers revealed that 70 were of the neurotic type 6 of the dermal and 44 of the mixed type.

Of 197 cases with perforating ulcers treated this year, only 11 remained under treatment at the end of the year. The rest were cured.

Of 378 cases of leprosy reaction, 306 were light and 72 severe. All were duly treated and improved.

Among the skin diseases met with this year, 357 suffered from scabies. All were treated and cured; 288 suffered from dermatitis. All were cured except 6 cases which were under treatment at the end of the year; and four cases suffering from tinea were still under treatment at the end of the year.

Of 334 blood specimens examined for Wassermann reaction, 132 were returned positive and 202 negative.

132 lepers were treated for syphilis during the year.

1,353 cases of medical diseases were treated during the year and recovered.

89 cases suffered from parasitic infections.

202 cases of chest diseases were treated.

The oculist paid the colony 40 visits for the treatment of eye diseases. A total of 3,200 lepers attended the ophthalmic clinic. 91 ophthalmic operations were performed.

The dentist paid the colony 46 visits for the treatment of 390 patients. 131 dental operations were performed.

A total of 103,196 dressings were applied to lepers this year, and 215 operations performed.

Specimens from the nose and skin of all the patients numbering 210 were taken for bacteriological examination and gave the following results:

Positive			Negative
Nose only	Skin only	Nose and Skin	Nose and Skin
48	22	75	65

510 samples of urine were examined and gave the following results: Bilharzia 52, albumen 15, pus 146, and chlorides 35.

Of 135 samples of faeces examined, 3 were returned positive for ancylostoma and 10 for ascaris.

The annual clinical and bacteriological examination was done to all residents of the colony and gave the following results:

*Clinical:* 262 lepers improved, 158 stationary and 34 deteriorated.

*Bacteriological:* 3 positive lepers became negative.  
9 negative lepers became positive.  
442 lepers unchanged.

### *Staff Clinic :*

Members of the staff and their families residing within the colony attended the staff clinic 3064 times. 56 home visits were paid to bed-ridden employees and their families.

### *Social Activities :*

*Patients' School :* 25 young lepers attended the day school and 19 adults attended the evening classes.

### *Library :*

The average monthly attendance at the library was 375 as against 350 in 1947. An average of 250 books were loaned monthly to lepers as against 100 in the previous year.

### *Religious Lectures and Preaching :*

Sermons were delivered to lepers after Friday prayers in their mosque. These had a good effect on their manners and behaviour.

### *Sports :*

The boyscout troop comprising 30 lepers carried various scout activities and sports.

### *Club :*

This provided lepers with refreshments and amusements.

### *Prison :*

31 leprous prisoners were admitted during the year to undergo the terms of imprisonment in segregation. 25 completed their terms of imprisonment and were discharged. 16 prisoners were in prison at the end of the year.

### *Industrial Activities :*

All lepers employed in the various workshops performed their duties satisfactorily.

### *Land Reclaimed :*

About 20 feddans (acres) were reclaimed by lepers for agricultural purposes.

### *Cairo Leprosy Hospital :*

Of 301 persons presenting themselves to the hospital for examination, 205 were found leprous. The remaining 96 suffered from other diseases and were referred to the competent hospitals for treatment.

### *New Patients :*

Of the 205 new lepers, 108 were of the neurotic type, 63 of the mixed and 34 of the dermal type.

### *Contacts :*

Lepers are advised to bring their contacts to hospital for examination with a view to detecting new infections. Re-examination of contacts is carried every three months. Of 68 contacts examined during the year, 27 contracted leprosy.

### *In-Patient Department :*

The in-patient department is exclusively reserved for female lepers until accommodation is provided in Abu-Zaabal colony.

There were 245 female lepers in segregation at the end of the year.

All domestic duties at the hospital e.g. cleaning, washing, etc. are undertaken by able lepers. The patients in residence are afforded every possible means of amusement.



### *Out Patients :*

Work in the three branch clinics in connection of this hospital was briefly as follows :

1. — New patients attending Embaba Clinic numbered 36. 2,759 patients were under treatment during the year.
2. — At Kara-Midan Clinic, there were 145 new patients and 7906 under treatment
3. — At Kaliub clinic, there were 15 new patients and 2719 under treatment.

### *Treatment :*

Hydnocarpus oil was again used in the treatment of patients being administered intramuscularly in weekly injections. Patients are also treated for other accompanying diseases and from complications and reactions.

A total of 23,671 injections were administered weighing 103 kgs. of hydnocarpus oil 19,043 dressings were applied during the year in the hospital and branches.

### *Amryia Colony :*

This was originally a military hospital. The Ministry took it over from the Egyptian Army in July 1947. In October of that year and following the outbreak of the cholera epidemic, it was decided to evacuate the in-patient section of Tanta leprosy clinic of its residents numbering 31 lepers. These were therefore transferred to Amryia colony on October 22, 1947. In January, 1948, inmates of the in-patient section of Minia Leprosy clinic, numbering 37 lepers, were transferred to the colony. Segregation of lepers in the colony was continued until by the end of the year, there were 131 lepers in residence as against 34 at the end of 1947.

### *Location of Amryia Colony :*

The colony lies 25 kilometres to the west of Alexandria, 7 kilometres to the east of Amryia village and 3 kilometres to the north of Abdel Kader village. It lies in the western desert west of Lake Mariut and is connected with these villages by desert roads. The colony is 95 feddans in area.

The State Buildings Department is undertaking the necessary modifications and repairs to render the colony suitable for the purpose.

### *Drinking Water :*

This is obtained from the Military water works of the Ministry of War and Marine.

Five electric current generators exist in the colony to supply lighting.

### *Lepers in Segregation :*

During this year, 98 lepers were admitted to the colony. On examination, 6 were found of the dermal type, 57 of the neurotic and 34 of the mixed type.

All lepers in segregation were treated for leprosy and other accompanying diseases. A total of 2818 patients were treated by the colony and 13,370 dressings were applied.

### *Recreation :*

Lepers are issued with a daily cup of tea and three cigarettes for smokers. Besides, residents are provided with amusements on feast days and special events. A radio receiving set is provided also, besides various games.

TABLE No. 137.—NUMBER OF PATIENTS IN LEPROSY UNITS DURING 1947 ACCORDING  
TO THEIR BIRTH PLACES AND RESIDENCE

Units	Cairo		Alexandria		Damietta		Canal		Suez		Behera		Gharbia		Menoufia		Dakahlia		Sharkia		Kaliubia		TOTAL	
	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence
Abu Zaabal ... ..	1	2	—	1	—	—	—	3	—	—	4	4	10	11	6	6	12	9	3	4	7	4	43	44
Amryia ... ..	1	1	3	6	2	2	—	—	—	—	5	5	19	19	5	3	5	5	—	—	—	—	40	41
Cairo ... ..	8	61	—	—	—	—	—	1	1	1	4	4	17	10	21	5	10	5	8	5	34	27	103	119
Zagazig ... ..	—	—	—	—	—	—	2	3	—	—	—	—	—	—	1	—	6	3	37	41	18	18	64	65
Souhag ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta ... ..	—	—	—	—	1	—	—	—	—	—	1	1	84	87	11	10	7	7	—	—	—	—	104	105
Minia ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alexandria ... ..	—	—	20	23	—	—	—	—	—	—	12	12	18	18	1	1	1	—	—	—	—	—	52	54
Mansoura ... ..	—	—	—	—	1	1	—	—	—	—	—	—	10	10	—	—	57	57	—	—	—	—	68	68
Shebin el Kom ... ..	1	1	—	—	—	—	—	—	—	—	1	1	1	1	50	50	1	1	—	—	4	4	58	58
Qena ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	11	65	23	30	4	3	2	7	1	1	27	27	159	156	95	75	99	87	48	50	63	53	532	534



TABLE No. 137.—NUMBER OF PATIENTS IN LEBROSY UNITS DURING 1947 ACCORDING TO THEIR BIRTH-PLACES AND RESIDENCE. (Contd.)

TABLE No. 137.—NUMBER OF PATIENTS IN LEBROSY UNITS DURING 1947 ACCORDING TO THEIR RESIDENCE																												
Units	Total		Giza		Beni Suef		Fayoum		Minia		Assiut		Gerga		Qena		Aswan		Sinai		Western Desert		Southern Desert		Abroad		Total	
	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence
Abu Zaabal	43	44	9	9	9	9	4	5	9	10	5	4	8	6	1	1	—	—	—	—	—	—	—	—	2	2	90	90
Amryia	40	41	2	2	4	4	1	1	26	26	14	14	4	4	—	—	—	—	—	—	4	4	—	—	2	1	97	97
Cairo	103	119	57	57	7	5	3	3	5	3	11	7	12	7	4	2	1	—	—	—	—	—	—	2	2	205	205	
Zagazig	64	65	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	65	65
Soubag	—	—	—	—	—	—	—	—	—	—	16	16	83	83	—	—	—	—	—	—	—	—	—	—	—	—	99	99
Tanta	104	105	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
Minia	—	—	—	—	—	—	—	—	14	14	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	15
Alexandria	52	54	1	1	—	—	—	—	1	—	1	1	1	—	1	1	—	—	—	—	—	—	—	—	—	—	57	57
Mansoura	68	68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68	68
Shebin el Kom	58	58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58	58
Qena	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34	34	4	4	—	—	—	—	—	—	—	—	38	38
TOTAL	532	554	69	69	20	18	8	9	55	53	48	43	109	100	41	38	5	4	—	—	4	4	—	—	6	5	897	897

TABLE No. 138.—NUMBER OF PATIENTS ATTENDING LEPROSY UNITS DURING 1947

Units	No. of patients			General Notes on lepers								Transmission of Infection																
	New patients	Negative	Positive	Males	Females	Married	Unmarried	Egyptians	Foreigners	Moslems	Copts	Other religions	Deny Inf.	Admit Inf.	Forgn. Inf.	Fam. Inf.	Father only	Mother	Parents only	Husband	Wife	Sons and daughters	Sisters	Relatives	Cu.	N.	Mix.	
Abu Zaabal Colony ... ..	90	—	90	90	0	42	48	90	0	87	3	0	70	20	7	13	2	1	0	0	0	0	—	8	2	4	57	29
Amria Colony ... ..	79	—	97	97	0	15	82	97	0	84	13	0	82	15	8	7	0	0	0	0	0	0	—	5	2	6	57	34
Cairo Hospital ... ..	304	99	205	141	64	103	102	204	1	197	8	0	169	36	9	27	3	1	0	0	0	0	—	10	13	34	108	63
Zagazig " ... ..	85	20	65	45	20	25	40	65	0	64	1	0	52	13	0	13	2	1	0	0	0	0	—	7	3	—	22	43
Souhag Clinic ... ..	162	63	99	76	23	51	48	99	0	82	17	0	87	12	0	12	2	1	0	0	0	1	4	4	—	50	49	
Tanta " ... ..	374	299	105	65	40	40	65	105	0	105	0	0	88	17	1	16	5	1	0	0	0	0	—	5	5	10	71	24
Minia " ... ..	15	0	15	13	2	9	6	15	0	13	2	0	13	2	0	2	1	0	0	0	0	0	—	1	—	—	2	13
Alexandria " ... ..	137	80	57	35	22	19	38	56	1	52	4	1	54	3	0	3	0	1	0	0	0	0	—	2	—	28	26	3
Mansoura " ... ..	99	31	68	49	19	31	37	18	0	68	0	0	62	6	0	6	2	0	0	0	0	0	—	3	1	—	46	22
Shebin el Kom Clinic ... ..	518	460	58	40	18	30	28	58	0	58	0	0	53	5	0	5	2	0	0	0	0	0	—	2	1	2	22	33
Qena Clinic ... ..	38	0	38	33	5	20	48	38	0	35	3	0	38	0	0	0	0	0	0	0	0	0	—	0	—	1	20	17
TOTAL ... ..	1916	1019	897	684	213	385	512	895	2	845	51	1	768	129	25	104	19	6	—	—	—	1	47	31	85	482	330	



TABLE No. 139.—ANNUAL STATISTICS OF LEPERS TREATED IN LEPROSY UNITS DURING 1947.

	Age of patients on first exam.							Age of patients on appearance of disease.											Duration of Disease						Laboratory findings.							
	from 1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 and over	from 1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	51 - 55	56 - 60	over 60	one year	two years	3 - 5 years	6 - 10 years	11 - 15 years	16 - 20 years	21 and over	Neg. B.	Pos. B.	Nose	Skin	N. and S.
Abu Zaabal Col.	1	27	30	13	9	3	1	—	11	11	22	17	7	8	3	5	2	2	1	1	7	18	35	25	4	1	—	44	46	13	7	26
Amryia Hospital	—	15	45	27	9	1	—	1	13	15	32	13	12	7	3	1	—	—	—	—	2	2	24	31	13	18	7	57	40	—	6	34
Cairo "	6	61	72	39	18	7	2	3	11	31	41	34	25	19	17	9	7	5	1	2	84	50	49	19	2	1	—	95	110	13	27	70
Zagazig Clinic.	2	21	18	18	3	2	1	1	5	13	11	7	10	9	3	1	3	1	1	—	4	16	31	14	—	—	—	21	44	—	—	44
Soubag "	6	28	23	22	7	8	5	4	8	17	11	14	15	8	4	2	4	4	7	1	1	6	80	12	—	—	—	18	81	32	—	49
Tanta "	12	36	32	12	11	1	1	4	10	24	14	20	5	5	6	5	4	4	2	1	51	16	29	6	3	—	—	51	54	15	9	30
Minia "	—	6	2	4	3	—	—	—	—	2	4	1	1	2	2	2	1	—	—	—	7	4	3	1	—	—	—	2	13	—	—	13
Alexandria "	2	23	18	9	4	1	—	1	11	10	11	8	7	2	3	3	1	—	—	—	1	4	38	14	—	—	—	26	31	—	13	18
Mansoura "	3	26	20	12	7	—	—	2	11	8	11	12	7	7	4	4	2	—	—	—	8	47	13	1	—	—	—	—	68	39	7	22
Shebin el Kom.	3	17	14	11	11	2	—	—	7	7	8	12	8	5	2	4	3	2	—	—	9	15	27	3	4	—	—	23	35	—	35	—
Qena "	—	9	9	10	6	4	—	—	2	6	7	3	3	5	6	4	—	—	2	—	4	8	17	8	—	—	—	20	18	—	1	17
TOTAL... ..	35	263	283	183	88	29	10	16	89	144	172	141	100	77	53	40	27	19	14	5	178	186	345	134	26	21	7	357	540	112	105	323

## Part V.—RESEARCHES AND LABORATORY EXAMINATIONS

### Chapter XXI. — Summary of the Work of the Department of Laboratories

#### 1. — *Bacteriological Section :*

The total number of specimens examined bacteriologically, in the Central, Provincial and Branch laboratories, during the year 1948, amounted to 816,128.

#### 2. — *Clinical-Pathological Section :*

5,643 specimens were examined in this Section during the year under review.

#### 3. — *Chemical Section :*

The total number of samples examined chemically in the Central laboratories as well as in the Tantah and Assiut laboratories, during the year 1948, was 68,168.

#### 4. — *Water Section :*

##### (a) *Bacteriological Service :*

The total number of samples of water, aerated water, ice and syrup examined by this Service during 1948 amounted to 7,990.

##### (b) *Chemical Service :*

During the year under review, 1,593 samples of water were subjected to chemical analysis.

#### 5. — *Antirabic Institute and Hospital :*

During the year 1948, 9,559 patients attended the Institute; and of these 9,334 were fully treated.

The number of patients who attended the Antirabic Out-Centre at Luxor amounted to 459 of whom 387 were fully treated.

#### 6. — *Serum and Vaccine Laboratory, Agouza*

The following vaccines and sera were prepared during the year 1948 :

i) Anti—Cholera° ... ..	3,390,200 c.c.s.
ii) Calf-lymph... ..	18,530,000 doses.
iii) T. A. B. ... ..	3,418,075 c.c.s.
iv) Anti-plague ... ..	340,775 c.c.s.
v) Diphtheria prophylactic (Formal Toxoid)	26,921 boxes, each containig 3 ampoules for 1 person. 618,350 c.c.s. (27142 bottles of 20 c.c.s. each) (7551 bottles of 10 c.c.s. each)
vi) Diphtheria Antitoxin. ... ..	21,000 ampoules of 4000 I.U. each.
vii) Anti-scorpion ... ..	51,000 ampoules.
viii) Anti-tetanus ... ..	17,073 ampoules. 3000 I.U. each.



## Chapter XXII.—Summary of the Work of the Research Institute for Tropical Diseases

### *Foreword :*

This report includes the research work that was carried out during the year 1948 in the different departments of the Institute. The work done in the malaria research stations at Khanka and Fayed is also reported.

### REPORT OF THE CLINICAL SECTION

#### (A) *Treatment of Schistosomiasis :*

During the year 1948, Miracil was used for the first time in the treatment of human schistosomiasis. At the same time, this drug was under trial for the same purpose in South Africa (Rhodesia). It was proved in the Institute, that Miracil cures urinary Bilharziasis. The doses administered varied between 18 and 22 mgms. per kgm. daily for 7 consecutive days or more. The toxic symptoms observed were nausea, vomiting, abdominal colics, giddiness and insomnia. The reflexes showed an increase in some cases and a diminution in others.

Investigations with the object of shortening the course of treatment with antimony drugs were also resumed. The following modifications in intensive treatment were carried out :

(1) Repodral was given in 5.5 ccs. doses intramuscularly three times daily for two consecutive days.

(2) A dose of 5 ccs. of the same drug was administered twice daily for 5 consecutive days.

(3) Tartar emetic was tried with a dose of 2 ccs., intravenously three times daily for two consecutive days.

(4) A dose of 1 cc. tartar emetic twice daily for five consecutive days.

(5) Daily doses, 2 ccs. each, of tartar emetic for ten consecutive days.

All the doses mentioned are those given to patients weighing 60 Kgms or more.

The routine method used for the treatment of Bilharzial infection during 1948 was however, the same that has been followed since 1946. The patient weighting 60 Kgms. or more is given one dose of 5 ccs. repodral intramuscularly for ten consecutive days. The excreta are examined directly after finishing the course of treatment. Further examinations are carried out one week, 2 weeks, and one month after. The ratio of apparent cure attained 70.5%

#### (B) *Treatment of Helminthic Infections :*

(1) Ancylostoma worms : The drug used was carbon tetrachloride in a dose of 5 ccs. a saline purge 2 hours after.

(2) Oxyuris worms : carbon tetrachloride in the same dose as used in the treatment of ancylostoma.

Gentian violet and Diphenan were used in treating a small number of cases, hence a definite opinion as regards their value in the treatment of oxyuris could not yet be given.

(3) Ascaris worms : a dose of 2 ccs. of oil of chenopodium is administered to be followed by a saline purge within two hours. Hexyl resorcinol (Brand named crystoids) was also used in the treatment of ascariasis. The doses given and the results obtained will be published in a special report.

(4) Hymenolepis worms: filix mas is given in a dose of 5 ccs. per 60 kgs. of body weight. A chloroquine derivative (Aralen) was also used as illustrated in a special report.

(5) *Taenia* worms : The drug used is atebirin. The dose given is 0.9 gram administered on an empty stomach after two days on fluid diet. A saline purge is given after two hours.

(6) Heterophyes worms : Treatment is carried out by flix mas with the same dose as that used in *Hymenolepis* infection.

All the doses mentioned above are those given to patients weighing 60 kgms. or more.

### (C) *Out Patients :*

The total number of patients who attended the outpatient department in 1948 was 8,237 classified as follows :

(1) Males more than 12 years of age...	...	...	...	...	...	...	...	4420
(2) Females	,,	,,	,,	...	...	...	...	2777
(3) Males less than	,,	,,	,,	...	...	...	...	582
(4) Females	,,	,,	,,	...	...	...	...	458

On their first day of attendance, all patients are subjected to a thorough clinical examination, examination of their urine and stools for parasitic infection, and estimation of hemoglobin percentage. Other investigations are performed for each case as required. These investigations include :

#### (1) Blood examination .

- (a) Complete blood picture.
- (b) Estimation of the sedimentation rate.
- (c) Microscopic examination for blood parasites.
- (d) Sternal puncture.

#### (2) Chemical tests .

- (a) Blood chemistry.
- (b) Liver function tests.
- (c) Kidney function tests.
- (d) Fractional test meals.
- (e) Complete urine analysis.
- (f) Chemical examination of stools.

#### (3) Bacteriological examinations.

- (a) Wassermann and Kahn reactions.
- (b) Widal and allied reactions.
- (c) Stool and urine cultures.

#### (4) Electrocardiography .

#### (5) Estimation of B.M.R.

#### (6) X ray films and screening.

The patients diagnosed as suffering from organic diseases numbered 814.



## REPORT OF THE X RAY DEPARTMENT

The following cases were investigated during the year 1948 :

(1) Chest and heart screening	... ..	144 cases
(2) Films for chest conditions	... ..	99 „
(3) Films for heart	... ..	142 „
(4) Plain films for the gall bladder and cholecystography	... ..	12 „
(5) Plain films for the urinary tract and pyelography	... ..	92 „
(6) X ray films for Bone affections	... ..	49 „

## REPORT OF THE HOEMATOLOGY SECTION

The following blood specimens were examined during the year 1948 :

(1) Hemoglobin estimations	... ..	9,766 „
(2) Complete blood count	... ..	994 „
(3) White cell counts	... ..	177 „
(4) Platelet count	... ..	15 „
(5) Coagulation time	... ..	19 „
(6) Bleeding time	... ..	19 „
(7) Sedimentation rate	... ..	178 „
(8) Examination for blood parasites	... ..	158 „

## Bacteriology Department

### *Culture of Stools :*

282 were cultured out of which 232 were negative and 50 positive in the following way :

6 Flexner	12%
8 Morgan	16%
19 Sonne	38%
13 Paracolon	26%
4 Shiga	8%

### *Culture of urine :*

364 samples of urine were cultured, 248 negative cases and 116 positive in the following manner :

61 B. Paracolon.
10 B. Friedlander.
5 Ps. Pyocyaneus.
2 Eb. Paratyphi B.
20 B. Paracolon.
4 Staphs.
1 Strepts.

### *Wassermann Reaction*

This test was done for 148 samples of serum out of which 23 were positive and the rest, 125, were negative.

### *Examination of Sputum for T.B.*

184 samples were examined. 35 proved positive while the 149 others were negative.

### *Widal Reaction :*

32 sera were examined 6 of which proved positive for enteric fevers.

### *Blood Culture :*

13 blood cultures were done, five of which were positive for enterica.

### *Miscellaneous :*

A few requests from the hospital were made for swabs from throats, and films for gonorrhoea, ulcers on the genitalia, lepral nasal swabs and ringworm.



## Protozoology Section

### *Summary of Research Work:*

#### A. *Balantidium coli*:

##### 1. — *The incidence of Balantidium coli in Egypt:*

Balantidiasis in man does not seem to be frequent in Egypt because during the last seven years only three cases were encountered. Also after consulting the literature of this infection in man in Egypt we found that it was rare.

Pigs are known to act as carriers of *Balantidium coli* which may cause dysentery in man, so they may transmit the infection to their owners. It was first intended to make sure that infection occurs in pigs in Egypt. In the Cairo abattoir, pigs from various parts of Cairo and its suburbs, as well as from other towns and villages are slaughtered. Twenty specimens of fresh stools obtained from slaughtered pigs were examined for balantidial infection. 80% of the stools were positive for *B. coli*, *B. suis* was also found in the stools of 50% of the specimens examined.

From the above, it is obvious that there is a good source of balantidial infection in Egypt.

It was then decided to examine the stools of some owners of pigs in Cairo. It is a pity that these owners and their families live with their pigs under very unhygienic conditions. The total number of owners of pigs and members of their families examined was 46. Cysts of *B. coli* were found in a boy aged 8 years at Ghamra. From the above it is clear that the balantidial infection can be transmitted from pigs to man.

##### *The Process of Budding of B. coli:*

(2) A medium could be devised for the growth of *Balantidium coli*, and in which a human strain could be maintained indefinitely. This medium is composed of buffered serum (horse, ox, sheep or man's serum) and a little rice. The growth of *B. coli* was heavy in this medium.

A curious phenomenon of cytoplasmic buds was observed in some individuals of *B. coli* in culture. Each of these was a protrusion from the wall of the active balantidium connected to the body of the organism by means of a narrow neck resembling tube through which the contents e.g. cytoplasm, starch granules and bacteria can pass to the protrusion. The processes vary in size, the biggest being about fifteen microns. They occur usually singly and only in a few balantidia. The occurrence of this phenomenon was also observed in *B. coli* obtained in an infected pig. After consulting the literature about this phenomenon, we found that it was never mentioned.

*B. coli* developed satisfactorily in the presence of *Blastocystis* in our culture. Encystation of *B. coli* was not observed in culture.

The details of the above mentioned work was published in the Journal of the Egyptian Medical Association Vol. : 31 December 1948. No. 12 pp.: 936-940.

##### B. — *A new medium for the cultivation of E. histolytica:*

After many experiments, a new fluid medium was devised for the cultivation of *E. histolytica*. This medium is composed of horse serum diluted with buffered Ringer's solution. The buffer was trisodium phosphate. The growth of the amoebae was copious in this medium for several months. The cultures were subinoculated twice every week. This medium differs from the well known buffered serum medium of Dobell.

This new medium can be easily prepared in the laboratory, and because it is fluid, it is very suitable for testing drugs. We tested the action with that of emetine in the same medium. Good results were obtained and corresponded with those of other workers. This work will be published later.

##### C. — *Testing the action of Atebrin on E. histolytica in man and in vitro:*

The action of atebrin on *E. histolytica* in man and in vitro was tested as has been shown above.



D.—*A new simple stain for Intestinal protozoa :*

A certain simple stain for intestinal protozoa was tried. Results are encouraging.

*Routine work.*

- (a) Examination of the stools of out-patients and in-patients for intestinal protozoa.
- (b) Maintenance of certain trypanosomes in mice.
- (c) Training of laboratory assistants on protozoal work.

BIOCHEMICAL DEPARTMENT

(1) Penicillin when injected in patients was found to decrease the prothrombin time of their blood samples as compared with those taken before penicillin administration.

(2) Gluck method for the estimation of choline in blood was examined for its recovery and was found to be the best as compared with other methods.

(3) Two lots of wheat, one was dusted with D.D.T. and the other with gammaxane. It was intended to prepare bread from each lot separately and examine the effect of each on experimental animals and then compare their results with those obtained last year.

The animals fed on this bread did not show any symptoms. These results confirmed our statement of last year that the D.D.T added is volatilised by the heat of the oven during the baking of the bread.

(4) The Roche firm of Switzerland sent to the Institute samples of pentavalent antimony compound to be examined as an antibilharzial drug.

The drug was injected in different animals for estimating its MLD. This was the first step to compare its toxicity with Foadin. Further experiments will be carried out with this drug.

(5) We are still collecting the greatest possible number of *Schistosoma bovis* worms from the slaughter house to prepare from them an antigen by the method devised in this section. It is intended that this antigen will undergo the complement fixation test.

(6) A new method for estimating chlorides in tissues was devised, and as it is known that the excretion of chlorides in urine in pneumonia is affected, it is intended to apply this method to animals that have been infected with pneumococci.

(7) After publishing the work of the treatment of bilharzia per os in monkeys, the same treatment was applied to human beings. When the first patient received the first dose of repodral (5 c.cs) he vomitted immediately. This was a strong motive to try all the different means of administration of the drug with a view to finding a safe way by which one can get rid of this undesirable symptom.

All the following methods of administration were tried but none proved of any practical value :

- (a) Repodral solution mixed with Tinc. Belladonna.
- (b) Repodral solution rendered acid with HCl.
- (c) Repodral solution rendered alkaline with Sod. Bicarb.
- (d) Repodral solution mixed with barbiturates.

It was then preferred to experiment on animals to overcome this difficulty. We started giving the repodral in very small doses and increasing the successive doses gradually with the hope that the animals (dogs) get used to the drug. Fortunately this method worked alright and the degree of tolerance of the drug increased and resulted in the prevention of vomiting. The achievement of this result in animals encouraged its use on human beings. The method, simple as it looks, gave very striking results to the extent that we could give the patient 10–15 ccs., of the drug in a single dose without the slightest tendency to vomiting.



Moreover it was found that this gradual increasing of dosage need be done on the first day only since a dose equal to the maximum dose given on the first day could be given quite safely every three hours. In some instances the maximum dose amounted to 15 ccs which was repeated four or five times without any after ill effects.

The next step was to titrate the dose required to raise the blood antimony of the patient to the level which is just sufficient to kill the parasites. That was not an easy job since a chemical method for estimating blood antimony was not available. And even the polarographic technique could not also be used because the apparatus itself was at that time lacking. It was therefore difficult to answer the question when to stop the administration of the drug to the patient — The only indication that we could depend on during the administration of the drug was by testing the patients urine daily for antimony. This method helped to a certain extent to show whether there was a gradual increase in antimony excretion during the successive days of treatment. But it was not enough to solve the problem of when to stop the administration of the drug to the patient.

For this reason Dr. Ayadi proceeded to London to gain some training in the use of polarography with Dr. Page of Glaxo Laboratories and to order an apparatus, it being one of the means for estimating trivalent antimony in the blood of bilharzial patients.

The results obtained during the treatment of some of the Bilharzial patients could be summarised in the following :

(1) Not one patient vomited after following the method described earlier for taking the drug per os.

(2) The number of bilharzial eggs in the urine increased in number on the 4th and 5th days of oral treatment. The same thing happens during the treatment by injections. The only explanation would seem to be due to the stimulation caused by the first amounts of antimony which reach the ovaries of the worms. Such stimulation would undoubtedly increase the number of eggs which on the other hand would increase bleeding.

(3) It was found that about 80% of the ova which appeared in the urine at about the end of the treatment were dead. This was confirmed by hatching experiments.

(4) The number of eggs and also the bleeding decreased gradually to a great extent and although the eggs never disappeared completely yet the patients felt more comfortable.

(5) When this oral treatment was tried on Manson cases, we got very encouraging results. For instance the patient named Shihata Ahmed No. 1743; was treated orally for six days. The eggs disappeared completely from his stools after a few days. Again different swabs from the patient were examined and were found negative. The problem anyhow still needs further investigation.

#### ENTOMOLOGY SECTION

This year, the section received 7627 thick drops of blood for malarial examination, out of which 223 were unfit for examination. Among the rest, there were 729 positives i.e. 94% of the drops examined. There were 69 cases of malignant tertian malaria i.e. 9.5% of the positives and the rest were of the B.T. type.

Of this material, 5966 drops were sent from the malarial units all over the country giving 4.6% of positives, 1266 drops from the general hospitals with 30.6% positives and 395 drops from the Bilharzia and Ancylostoma units with 25.6 % positives.

The new antimalarial drugs forwarded this year were tried to estimate their efficiency compared to the other known drugs. These drugs were Aralen, Nivaquine, Camoquine and Paludrine. This work was published.

12703 thick drops of blood were also received for filarial examination. Among these 224 drops were unfit for examination i.e. 1.8 per cent of the material received, 776 positives or 6.2 per cent of the material received. There were 12604 drops from the Filaria Station at Rosetta which gave 755 positives or 6.1 per cent. The rest of the material were either taken from the in-patients or out patients of the Institute.

Hetrazan was used to test its effect on filariasis and especially on the microfilaria in blood. Many cases showed complete cure while others showed a great diminution in



number of Mf. and with continuous use the results were encouraging — The work was published after a long observation period and the drug is now used on a large scale.

The section received 1357 specimens for entomological examination of which 63 were unfit i.e. 4.6 per cent. Of the material examined, 892 specimens contained one of the following species of mosquito larvae : *A. Pharoensis*, *A. Multicolor*, *A. Sergenti*, *A. mauritanus*, *Culex pipiens*, *C. pusillus*, *C. quasegledus*, *Aedes aegypti*, *Aedes caspius*, *Theobaldia*, *Uranotaenia* and *Dixaaestivalis*. There were 9 specimens with incomplete information and 332 specimens contained adult nematocera which were either *C. ppes*, *C. prex*, *Aedes caspius* or chironomidae. There were also 7 specimens sent from fever hospitals and quarantine offices which contained flies, i.e. *Musca vicina*, *Musca domestica*, *Musca Sorbens*, *Muscina stabulans*, *Fania conicularis*, *Sarcophaga-stomoxys calcitrans*. A number of insecticides were tried in the Research institute to demonstrate their efficiency and many of these were sent from the Malaria Section for physical, chemical and for insecticidal properties.

537 specimens of insects collected from rats trapped from the sea-ports or shipping were received. They were sent for examination by quarantine offices. All of them were fleas and among 4136 fleas examined, 2723 were of the *Xenopsylla* species, 1406 *Leptopsylla* and *Echidnophoga golluae*. The rats trapped were either *Rattus rattus*, *Rattus norvegicus*, *R. Alex*, *Achomys* or *Sori* and the last 2 species were found always free from fleas.

We have this year trained ten agricultural engineers and 31 technical assistants delegated by the different sections of this ministry for the study of malaria and measures of control.

During work at Khanka Malaria Station, curative treatment as well as prophylactic treatment of malaria with different chemical compounds were tried and published. During work at Fayed Malaria Station, a survey of the whole district for parasitic infections was done. About 59 per cent of the inhabitants had urinary Bilharziasis, 52 per cent had Ancylostomiasis, 30 per cent Ascariasis and not less than 95 per cent infected with different parasites. A survey of the area for snails was done and besides snails of no medical importance, bulinus snails were found in the main Suez Canal, and on the banks and in the channels taking from it. Also *Planorbis boissyi* were found distributed especially to the north of Fayed and Birquet Abaza. The *Lymnea truncatula* snails, being semi aquatic, were found in the sloping ends of drains near the building of the malaria station. A scheme was made for treatment of parasitic diseases in the locality and for control of schistosomiasis and eradication of snails.

According to request of the Ministry of Agriculture, continuous examination was being done throughout the whole year for the different tissues of goats fed on grass treated with D.D.T., to show if there is any D.D.T. preserved in the tissues.

A survey was made of parasitic infection with cestodes among Egyptians and the different drugs used for treatment were also tested for their efficiency as compared to other new remedies. This work is published.

#### FAYED MALARIA RESEARCH STATION

The activities of the station cover Fayed, Fanara and Genefa villages. British military installations are scattered throughout this area. The cultivated land is irrigated by means of a number of water channels which feed from the Suez fresh water canal and throw into the general control drain that terminates in the Bitter Lake. Water is supposed to run in these channels by rotation but farmers are apt to disregard their turn and draw water daily. Hence waste water collects everywhere.

The main function of the Station is to control the mosquito breeding places in these water collections. To facilitate the work, the area has been divided into four divisions, each having a malaria outpost, namely, (a) Fayed north, (b) Fayed South, (c) Fanara and (d) Genefa outposts.

Control measures comprise :

- (1) Weekly dusting with Paris Green of all water channels and courses.
- (2) Periodical weekly spraying with malariol of ponds and drains.
- (3) Clearance and maintenance of the State Control drains and other State drains.
- (4) Supervision of the clearance of private drains and miskas.



(5) Clearing the sand which accumulates at the end of the control drain by the action of waves of the Bitter Lake.

(6) Treating cisterns of private dwellings with malariol.

55 anopheles breeding places were discovered this year. Examination at the Station revealed that 45 samples or 82 per cent were *A. Pharoensis*, 8 or 14.5 per cent *A. multicolor* and 2 or 3.5 per cent were *A. mauritanus*. This shows that *A. Pharoensis* was the predominant species. It abounded during June, July, August and September.

Besides the above control measures, the Fayed Station undertakes the treatment of all positive malaria patients who attend the Station.

Of a total of 6,848 blood specimens examined during the year, 80 or 1.2 per cent were returned positive (78 of these or 1.17 per cent were benign tertian and 2 or 0.03 per cent malignant tertian).

#### KHANKA MALARIA RESEARCH STATION

For purposes of control of mosquito breeding places, the area has been divided into six zones, each has a malaria supervisor with a number of workmen to undertake clearing and dusting with insecticides all breeding places within the zone. The medical officer of the station has supreme supervision of all the zones.

As a result of the control measures, all larvae of anopheles mosquitoes were exterminated.

Besides control measures, the Station conducts experiments with new anti malaria drugs with a view to estimating their efficiency in the treatment of malaria. Paludrine, Nivaquine, Aralen and M.K.M.K.T. were tried on patients attending the station. Every positive case is subjected to a number of tests before treatment is commenced. The Haemoglobin content is estimated, the urine is tested for albumen, diabetes and parasites. The stools are also examined. Treatment is then given daily. Daily specimens are examined until a negative result is obtained. The patient is placed under observation and specimens for examination taken every fortnight.

#### MALARIA IN KHANKA MENTAL HOSPITAL

40 specimens taken from patients and staff of the hospital reporting sick were examined by the Station. 15 specimens were returned positive for benign tertian malaria.

#### ABU ZAABAL PRISON

692 specimens were examined during the year., 55 or 7.9 per cent were returned positive (51 or 7.3 per cent for benign tertian and 4 or 0.5 per cent for malignant tertian).

#### ABU ZAABAL E.S.R. WORKSHOPS

No breeding places were discovered within a radius of three kilometres round the area. Of 525 specimens taken from persons suffering from symptoms of malaria and examined, six or 1.1 per cent were returned positive for benign tertian.

The Khanka Station examined a total of 24,959 specimens during the year. 4,246 or 16.9 per cent were returned positive (3,814 or 15.2 per cent for benign tertian and 432 or 1.7 per cent for malignant tertian).

#### INCIDENCE OF MALARIA

Of the specimens examined, 20,211 were taken from residents within the area and 4,748 from outside. Of the former, 1,719 or 8.5 per cent were returned positive (1588 or 7.8 per cent for benign tertian and 131 or 0.6 per cent for malignant tertian). Of the latter, 2,527 or 53.2 per cent were returned positive (2,226 or 46.8 per cent for benign tertian and 301 or 6.3 per cent for malignant tertian). This demonstrates the success of control measures taken within the area.



## Chapter XXIII.—Summary of Work of the Memorial Ophthalmic Laboratory, Giza, during 1948

Field experiments on the bacteriology, epidemiology and prevention of acute ophthalmia have been continued, and further progress has been made.

In the Laboratory, research has been primarily devoted to the aetiology and treatment of trachoma.

In the clinical department, the application of modern therapeutic agents to the prevalent eye diseases of Egypt is under constant study and review.

The routine pathological work of the Government ophthalmic hospitals was carried out as usual at the Laboratory. During the year, 241 histopathological specimens were examined and reported upon.

The bacteriological work included examination of 1,154 conjunctival smears, 271 cultures and 550 miscellaneous tests.

As in previous years, the staff of the Laboratory shared in the teaching of candidates of the Diploma of Ophthalmic Medicine and Surgery.

### PART VI.—APPENDICES

#### Appendix I — MEDICAL PERMITS

TABLE NO. 140.—NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1948 AS COMPARED WITH THAT OF THE YEAR 1947.

Professions	At the end of 1947	At the end of 1948
Medical Practitioners ... ..	4,395	4,470
Veterinary Surgeons ... ..	547	446
Dental Surgeons ... ..	538	553
Dentists without diplomas* ... ..	116	109
Pharmacists ... ..	1,250	1,317
Assistant Pharmacists* ... ..	330	325
Midwives ... ..	936	965

\* Permits are no longer issued to persons of these two categories.

TABLE NO. 141.—NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS IN EGYPT DURING THE LAST FIVE YEARS

Professions	1944	1945	1946	1947	1948
Medical Practitioners ... ..	100	151	194	142	128
Veterinary Surgeons... ..	14	12	28	24	1
Dental Surgeons ... ..	17	9	8	14	19
Pharmacists ... ..	25	46	62	120	77
Midwives ... ..	35	59	61	68	30
Dayas } Green Permits ... ..	77	147	192	141	221
} White Permits ... ..	2	2	—	2	—
Barbers ... ..	5	14	2	7	6

TABLE No. 142.—ORIGIN OF MEDICAL DIPLOMAS WHOSE HOLDERS WERE  
AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1948

Professions	Cairo	Alexandria	Gaert Britain	Switzerland	Lebanon	France	Greece	Turkey	TOTAL
Medicine ... ..	86	9	8	2	3	7	12	1	128
Veterinary Surgery ... ..	1	—	—	—	—	—	—	—	1
Dental Surgery ... ..	7	—	—	—	7	1	4	—	19
Pharmacy .. ...	71	—	—	—	2	4	—	—	77
Midwifery ... ..	30	—	—	—	—	—	—	—	30

TABLE No. 143.—NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE  
MEDICAL PROFESSIONS DURING 1948

Professions	Egyptians	Greeks	Albanians	Franch	British	TOTAL
Medical Practitioners ... ..	112	13	1	1	1	128
Veterinary Surgeons ... ..	1	—	—	—	—	1
Dental Surgeons ... ..	13	5	—	—	1	19
Pharmacists ... ..	76	1	—	—	—	77
Midwives ... ..	30	—	—	—	—	30

TABLE No. 144.—SHOWING THE ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN PRACTITIONERS  
WHO WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1948

Professions	Universities						TOTAL
	Cairo	Alexandria	British	Swiss	French	Lebanese	
Medicine ... ..	86	9	7	2	5	3	112
Veterinary ... ..	1	—	—	—	—	—	1
Dentistry ... ..	7	7	—	—	1	5	13
Pharmacy ... ..	71	—	—	—	4	1	76
Midwifery ... ..	30	—	—	—	—	—	30

TABLE No. 145.—SHOWING THE RESULT OF THE STATE EXAMINATIONS HELD DURING 1948 FOR  
MEDICAL PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS FOR  
THE PURPOSE OF RECORDING THEIR NAMES IN THE MINISTRY'S REGISTERS.

Examinations	Number	Egyptians		Foreigners		TOTAL	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine ... ..	63	7	17	4	35	11	52
Pharmacy ... ..	21	1	14	1	5	2	19
Dentistry ... ..	12	4	2	3	3	7	5



## Appendix II.-REPORT ON THE WORK OF THE CENTRAL GOVERNORATE AND PROVINCIAL MEDICAL COMMISSIONS

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### *The Central Medical Commission :*

The number of medical certificates issued by the Central Medical Commission during 1948 was 29,739 i.e. 65 certificates more than in 1947, in spite of the extension of attributions of Medical Commissions in Governorates and Provinces to cover the granting and approval of sick leaves up till 60 days and the invaliding out of service of temporary officials and hors cadre employees and daily paid staff without further reference to the Central Medical Commission for final sanction.

Of this number, 15,412 candidates for government service or educational missions abroad were examined by the Central Medical Commission. These consisted of 9,469 candidates for permanent or temporary posts, 168 for educational missions and 5,775 hors cadre posts.

60.4 per cent of the first group and 44.5 per cent of the last group passed the medical examination. Of the 39.6 per cent failures in the first group, 24.6 per cent failed in vision-Myopia accounting for most of them: 6.9 per cent for main defects of the urinary system-albumen or traces thereof being the main cause; 1.4 per cent for heart diseases-with incompetency of the heart as the main complaint, and 6.7 per cent for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases. Of the 55.5 per cent failures in the last group, 34.6 per cent failed in vision-Myopia accounting for most of them; 11.9 per cent for defects of the urinary system-albumen or traces thereof being the main cause; 1.0 per cent for heart diseases with incompetency of the heart as the main complaint and 8.0 per cent for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility, flat foot or respiratory diseases.

A total of 9,434 medical certificates dealt with leaves granted to government officials reporting sick. These consisted of 6,972 pensionable and temporary officials and 2,462 hors cadre employees.

Of those granted sick leaves by the Central Medical Commission or by the Cairo Medical Officers of Health and approved by the Central Medical Commission, 3,771 pensionable and temporary officials and 1,095 hors cadre employees were found suffering from medical diseases and 1,864 pensionable and temporary officials and 551 hors cadre employees were suffering from surgical and ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and the ratio of their prevalence :

TABLE No. 146

Diseases	Pensionable and Temporary Officials		Hors Cadre Employees	
	Number	Percentage to the Total	Number	Percentage to the Total
Nose and Larynx ... ..	302	5.36	82	4.98
Bronchi and Lungs ... ..	337	5.98	96	5.83
Heart and Blood Circulatory System ... ..	480	8.52	55	3.34
Stomach and Intestines ... ..	229	4.06	81	4.92
Liver ... ..	255	4.53	35	2.13
Kidney and Cystis ... ..	228	4.05	35	2.13
Neurasthenia ... ..	46	0.82	2	0.12
Mental Diseases ... ..	229	4.06	107	6.50
Nervous system ... ..	199	3.51	35	2.13
Anaemia and General Debility... ..	539	9.57	174	10.57
T.B. ... ..	449	7.97	275	16.70
Syphilis ... ..	5	0.9	3	.18
Rheumatism ... ..	381	6.77	88	5.35
Fevers ... ..	71	1.26	22	1.34
Other Medical Diseases ... ..	21	0.37	5	.30
Eye Diseases ... ..	201	3.55	50	3.04
Ear Diseases ... ..	32	0.57	12	.73
Appendicitis ... ..	73	1.30	29	1.76
Hernias ... ..	64	1.14	22	1.34
Fistulae ... ..	82	1.46	7	.43
Piles... ..	125	2.22	31	1.88
Hydroceles ... ..	12	0.21	4	0.24
Urinary System and Stones ... ..	74	1.31	10	0.60
Various Surgical Operations ... ..	922	16.36	271	16.47
Fractures ... ..	155	2.76	87	5.29
Dental Diseases ... ..	124	2.20	28	1.70

54,623 officials and employees were granted from 1-10 days sick leave by Cairo Offices and by Markaz and Sanitary Outposts in all the Provinces and Governorates during the year 1948. Of these 41,459 or 75.9 per cent suffered from medical diseases ; 10,157 or 18.6 per cent suffered from surgical diseases and 3,007 or 5.5 per cent suffered from ophthalmic diseases. The total number of days of sick leave granted to the pensionable and temporary officials only amounted to 173,140.



1,739 pensionable and temporary officials and 572 hors cadre employees in Cairo only were granted from 1-10 days sick leave by the Central Medical Commission or by Cairo Medical Officers of Health.

305 pensionable and temporary officials and 104 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

1,083 pensionable and temporary officials and 1,023 hors cadre employees were examined by the other Provincial and Governorate Medical Commissions but were not granted any sick leave.

3,896 pensionable and temporary officials and 1,107 hors cadre employees were granted from 11 to 30 days sick leave and over by the Central Medical Commission and by Cairo Officers of Health.

The Central Medical Commission granted 62 pensionable and temporary officials longer sick leaves terminating by their retirement on pension; and pronounced 179 hors cadre employees medically unfit for further service.

20 pensionable and temporary officials and 37 hors cadre employees were pronounced fit for further service.

#### *Medical Examination of Private and Passenger Pilots :*

Of 209 candidates for private pilot Licence "A" examined by the Central Medical Commission during 1948—145 were found fit (128 in the first examination, 13 in the second and 4 in the third examination). 43 of 64 failures were examined once, 17 were examined, twice and 4 were examined three times.

Of 29 candidates for passenger pilot Licence "B" examined by the Central Medical Commission during 1948 — 27 were found fit from the first examination, 1 of the 2 failures was examined once, and the other twice.

Out of 84 private pilots examined for renewal of licences, 83 were found fit (80 in the first examination and 3 in the second examination). 1 was found unfit and was examined once.

Out of 117 passenger pilots examined for renewal of licences, 116 were found fit in the first examination and 1 in the second examination.

#### *Provincial and Governorate Medical Commissions :*

A total of 50,098 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year 1948; i.e. 5,880 certificates fewer than those of last year.

TABLE No. 147. ANNUAL REPORT ON THE WORK OF THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS DURING THE YEAR 1948.

	Objects of Medical Examinations										Causes of Rejections of Candidates applying for Entry into Service									
	Number of Cases										Diseases									
	For Admission to Service					Candidates for Missions					For Sick Leave					Invaliding				
	Pensionable and Temporary		Hors Cadre			Refused				Granted		Unfit		Fit		Determination of Age		Other Examinations		Total
	Rejected in 1st Session	Rejected in 2nd Session	Fit	Unfit	Unfit	Rejected in 1st Session	Rejected in 2nd Session	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	
...	818	454	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	3,056	253	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	641	70	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	14,047	11,476	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	16,205	13,001	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	96	—	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	35	—	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	35	—	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,390	1,083	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,127	1,023	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	78	16	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,860	1,681	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	25	5	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,363	1,326	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	64	19	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,876	1,010	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,251	—	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	2,200	399	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	2,067	1,442	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	79,837	50,098	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	2,971	593	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	11,001	8,999	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	777	112	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	3,540	2,852	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	112	14	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	305	261	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	149	17	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	135	74	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	7	—	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	12	10	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	—	—	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	3	3	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	569	39	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	1,209	802	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	4,587	777	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204
...	16,205	13,001	2,803	571	2,571	3,204	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	Unfit	3,204

NB.—P. = Pensionable, T. = Temporary. H.C. = Hors Cadre.



TABLE No. 148.— CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES FOR WHICH SICK LEAVES WERE GRANTED BY THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS AND BY THE DISTRICT M.Os. IN CAIRO AND APPROVED BY THE C.M.C. DURING THE YEAR 1948

DISEASES

	Medical Diseases															Surgical and Ophthalmic Diseases																																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTAL		1	2	3	4	5	6	7	8	9	10	11	TOTAL																									
Central Medical Commission	Nose and Larynx	Bronchi and Lungs	Heart and Cir. System	Stomach and Intestines	Liver	Kidney and Cysts	Neurasthenia	Mental Diseases	Nervous System (Cereb. and Cord)	Anaemia and General Debility	T. B.	Syphilis	Rheumatism	Fevers	Other Medical Diseases	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	Piles	Fistulae	Hernia	Appendicitis	Hernia	Hydroceles	Urinary System and Stones	Other Surgical Operations	Fractures	Dental Diseases	P. & T.	H. C.																				
	82	338	96	480	55	229	107	199	35	639	174	449	275	5	3	381	88	71	22	21	5	1,095	3,771	201	50	32	12	73	29	64	22	82	7	125	31	12	4	74	10	922	271	155	87	124	28									
Governorate and Provincial Medical Commissions	179	764	639	411	363	332	218	11	49	683	681	184	224	33	63	834	604	217	317	453	508	4,249	5,316	221	215	107	76	77	55	70	107	99	79	183	162	33	44	147	87	644	419	276	649	69	58									
	3,951	1,910	3,951	1,864	551	1,864	1,910	3,951	1,864	551	1,864	1,910	3,951	1,864	551	1,864	1,910	3,951	1,864	551	1,864	3,951	1,910	3,951	1,864	551	1,864	3,951	1,910	3,951	1,864	551	1,864	3,951	1,910	3,951	1,864	551	1,864	3,951	1,910	3,951	1,864	551										
TOTAL	481	1,101	735	1,094	267	640	403	619	212	560	294	264	111	240	109	248	55	1,222	853	633	499	8	66	1,215	288	339	474	513	9,087	5,344	422	265	139	88	150	84	134	129	181	86	308	193	45	88	221	97	1,566	2,690	431	736	193	86	3,774	4,502
N.B.—P. = Pensionable.		T. = Temporary.		H.C. = Hors Cadre.																																																		

### Appendix III.—REPORT ON THE WORK OF THE CENTRAL STORES.

The Central stores continued to supply the various units of the Ministry with modern apparatus, equipment and drugs.

During this year, the following units were furnished and equipped :

One hundred public health offices in different localities and five chest diseases hospitals at Zagazig, Suez, Damanhour, Damietta and Mallawi.

The following table No. 149 gives a summary of the work of the Central Stores during the year :

TABLE No. 149

Kind of Work	Number
Receipt vouchers ... ..	12,221
Issue vouchers ... ..	11,2568
Claims... ..	2,006
Postal parcels dispatched ... ..	16,079
Postal parcels received ... ..	3,537
Railway Consignments dispatched ... ..	53,842
Railway parcels received ... ..	21,546
Repairs Carried out by C.S. Workshops ... ..	100,286
New Works ,, ,, ,, ,, ,, ... ..	113,338

The following are the new units opened during the period from 1st January until the end of December 1948 :

- (1) 1 Chest diseases dispensary at Zifta, and a sanatorium at Port-Saïd.
- (2) 2 Chest diseases out-patient branches in connection with Gerga and Kafr-el-Zayat district hospitals.
- (3) 1 Ancylostoma branch at Matâana district hospital.
- (4) 2 Fever hospitals at Mehalla-Kobra and Benha.
- (5) 1 Child welfare centre at Samallout.
- (6) A bath house, a public laundry, and a disinfection station within Bulaq health centre.
- (7) 1 Venereal diseases clinic at Samalout.
- (8) 2 Mobile units for scabies and skin diseases at Saft-el-Khammar and Ibrahimia.
- (9) 1 Unit for Bilharzia destruction at Menoufia.
- (10) 21 health centres at Nedeba, Shabas-emir, Meniet-el-Morchid, Abshan, Diest, Miniet-el-Nasr, Malamis, Mashtoul-el-souk, Kassasin, Shubra-Bakhroum, Mithalfa, Arab Goheina, Sendbeis, Nahia, Shater-Zada, Tobash, Azizieh, Beni-Aly, Menshat-Lotfalla, Sahel-Selim, and El-Dair.
- (11) 1 Branch for treatment of Rabies within the ophthalmic hospital at Alexandria.
- (12) 2 Health propaganda units at Damanhour and Beni-Suef.



The following table No. 150 gives the number of contracts concluded during the year 1948 :

TABLE No. 150

Kind of work	Number
General Adjudication ... ..	476
Local           ,,     ... ..	131
Contracts ... ..	750
Local Orders ... ..	417
Foreign orders ... ..	54
Forms 50 c.g ... ..	2,819
Subjects submitted to the Contract Board ... ..	2,441
Number of meetings held by the Contract Board ... ..	288
Tenders submitted in general adjudications ... ..	1,565
Number of Agreements ... ..	6
Miscellaneous Orders ... ..	90
Tenders submitted in local adjudications ... ..	540
Purchases made by bargain ... ..	43

#### Appendix IV.—DETAILS OF BUDGET GRANTS AND ACTUAL EXPENDITURES

TABLE No. 151.

TITLES	Budget Grants		Actual Expend	
	1947	1948	1947	1948
	L.E.	L.E.	L.E.	L.E.
<b>TITLE I</b>				
Salaries, Wages and Allowances ... ..	1,415,705	1,738,631*	1 165,463	1,642,999
<b>TITLE II</b>				
General Expenditures ... ..	1,847,780	2,227,550	1,641,161	1,908,670
<b>TITLE III</b>				
New Works ... ..	545,695	1,439,510	321,940	65,095
<b>TOTAL ... ..</b>	<b>3,809,180</b>	<b>5,405,691</b>	<b>3,128,564</b>	<b>4,176,764</b>

\*An additional credit of L.E. 100,000 was granted under law No 40 of 1949.

TABLE No. 152—DETAILS OF POSTS IN THE VARIOUS DEPARTMENTS

Posts	1947	1948
<i>Permanent Posts :</i>		
Technical and Administrative Senior Posts	1,378	1,654
Intermediate Technical Posts ... ..	532	1,158
Clerical Posts ... ..	759	1,100
<i>Temporary Posts :</i>		
Technical Posts... ..	016	26
Clerical Posts ... ..	606	366
Hors Cadre Personnel ... ..	9,189	9,844
	<b>13,280</b>	<b>81,148</b>

**Appendix V.—SUMMARY OF REPORT ON THE  
STATE OF PUBLIC HEALTH IN ALEXANDRIA.**

TABLE No. 153

Population ... ..	949,789
Number of births ... ..	48,421
Number of deaths ... ..	20,528
Number of still births .. ..	724
Number of Infantile deaths ... ..	8,486
Number of cases of infectious diseases ... ..	9,787
Number of deaths of infectious diseases ... ..	1,956



TABLE No. 154. — CASES AND DEATHS FROM INFECTIOUS  
DISEASES REPORTED IN ALEXANDRIA DURING 1948.

Diseases	Cases	Deaths
Typhus ... ..	14	4
Cerebro Spinal Fever ... ..	9	7
Typhoid ... ..	1,021	156
Paratyphoid ... ..	134	6
Scarlet Fever ... ..	3	—
Diphtheria ... ..	235	55
Measles ... ..	662	50
Whooping Cough ... ..	87	3
Mumps ... ..	597	1
Malaria benign tertian ... ..	566	1
Malaria malignant tertian ... ..	5	1
Erysipelas ... ..	597	6
Tetanus ... ..	60	32
Pulmonary Tuberculosis ... ..	1,023	639
Tuberculosis of other organs ... ..	57	54
Chicken Pox ... ..	520	1
Influenza ... ..	1,733	1
Puerperal fever ... ..	89	4
Dysentery, Amoebic ... ..	196	45
Dysentery, Bacillary ... ..	212	8
Broncho Pneumonia... ..	1,003	735
Lobar Pneumonia ... ..	952	142
Acute Poliomyelitis ... ..	4	2
Leprosy ... ..	4	—
Rabies... ..	3	2
<b>TOTAL ... ..</b>	<b>9,787</b>	<b>1,956</b>

## Appendix VI.—CAIRO CITY HEALTH DEPARTMENT.

### Population :

The estimated mid-year population of Cairo City in 1948 was 2,076,601.

The following is the distribution of this population in the different qisms :

Qubba	...	...	...	...	...	84,427
Heliopolis	...	...	...	...	...	85,585
Zeitoun	...	...	...	...	...	79,547
Abbassia	...	...	...	...	...	123,289
Ezbekia	...	...	...	...	...	75,413
Rod-el-Farag	...	...	...	...	...	195,890
Shubra	...	...	...	...	...	160,704
Sharabia	...	...	...	...	...	68,962
Gamalia	...	...	...	...	...	108,744
Bab-el Shaaria	...	...	...	...	...	133,334
Abdin	...	...	...	...	...	96,911
Mouski	...	...	...	...	...	52,942
Darb el Ahmer	...	...	...	...	...	114,858
Khalifa	...	...	...	...	...	115,200
Sayedda I	...	...	...	...	...	92,800
Sayedda II	...	...	...	...	...	101,064
Bulaq I	...	...	...	...	...	63,905
Bulaq II	...	...	...	...	...	99,648
Adawia	...	...	...	...	...	63,555
Old Cairo	...	...	...	...	...	101,568
Helwan	...	...	...	...	...	45,686
Maadi	...	...	...	...	...	45,569
TOTAL						2,076,601

### Births :

The total number of births (excluding still-births) registered during the year was 99,557 or 889 less than the previous year. This gives a birth-rate of 47.9 per thousand of population.

Table No.155 shows the number of births distributed on the various qisms, and their rates per thousand of population.

The number of still-births registered during this year was 1,831 or a rate of 18.4 per thousand births as compared with 2081 during 1947, 2025 during 1946 and 2,069 during 1945.

### Deaths :

During this year, a total of 53,378 deaths were registered of which 1,242 occurred amongst non-residents. This leaves 52,136 deaths proper for Cairo City with an excess of 8,449 over 1947, and a death-rate of 25.1 per thousand of population, as compared with 27.5 in 1947;33.7 in 1946; and 33.9 in 1945 per thousand of population and a mean death-rate of 35.4 for the 5 years (1942-1946).

Table No. 155 shows the distribution of these deaths on the various qisms and their rates compared with each other and with the rates of previous years.



### *Infantile Mortality :*

The total number of deaths of infants under one year of age was 19,908 with an excess of 2,707 over the previous year and a rate of 190.9 per thousand births. This rate was 161 in 1947 ; 199.6 in 1946 ; 208 in 1945 and 219 for the 5 years (1942-1946).

Infantile deaths constituted 38.1 per cent of the total Cairo deaths as compared with 39.3% in 1947, 36.6% in 1946, and 37.6% in 1945.

Table No. 155 shows the distribution of these deaths on the various qisms and the rates in the previous years.

### *Causes of Infantile Mortality :*

Diarrhoea and enteritis are still the most important diseases affecting children. They were responsible for 11,538 deaths or 58% of the total infantile deaths.

Marasmas and general debility come next accounting for 5,755 deaths or 25.8%.

1,121 deaths or 5.5% were from respiratory diseases. This figure does not include deaths from broncho and lobar pneumonia. Infectious diseases accounted for 652 deaths or 3.2%. 842 deaths or 4.2% were from other diseases.

### *Death Inquiries :*

The total number of uncertified deaths requiring investigation during 1948 was 26,644 or 50% of the total of Cairo deaths.

District medical officers investigated 8,680 deaths or 32.5% of the number. The remaining 17,964 deaths were examined by district mid-wives (Table No. 156).

### *Infectious Diseases :*

The total number of cases of infectious diseases notified during 1948 was 14,793 from Cairo City and 874 from outside, as compared with 14,413 cases in 1947, 29,196 cases in 1946, 20,627 cases in 1945, 20,287 cases in 1944, and 27,771 cases in 1943.

The total number of deaths from infectious diseases during the year was 5,029 with a rate of 9.6% of the total deaths of Cairo City as compared with 9.6% in 1947, 11.5% in 1946, 10.4% in 1945, 13.2% in 1944 and 15.8% in 1943.

Table No. 157 gives the most prevalent infectious diseases and their distribution on the various districts.

### *Cholera :*

No cases or deaths from cholera occurred during 1948. This shows that the control measures taken at the outbreak of the epidemic did not only suppress the disease during the winter of 1947, but also saved the City, nay the Egyptian Kingdom, from a recurrence during 1948.

### *Vaccination Against Cholera :*

According to a decision of the cholera committee to revaccinate the whole population, the Cairo City Health department began in December 1947 to survey the population of the City.

On 21/2/1948 the re-vaccination of the inhabitants was commenced by 164 stationary centres distributed throughout Cairo districts and six mobile teams, later increased to 15 teams, for the revaccination of Ezbas and suburbs.

Until 31/3/1948, a total of 1,909,182 persons were revaccinated. As from 1/4/1948 66 mobile teams were formed to carry a house to house re-vaccination of those left out and to record those already re-vaccinated and provided with re-vaccination certificates. 117,722 persons were thus re-vaccinated until the end of May, bringing the total re-vaccinations to 2,026,904.

### *Relapsing fever :*

No cases or deaths from Relapsing fever were reported during 1948 as compared with 14 cases during 1947, 11,903 cases during 1946, and 2,404 cases during 1945.



This shows that the Relapsing fever epidemic that broke out in 1945 and spread in 1946 in an unprecedented epidemic form, came to an end in 1947.

Gangs were organised for the protective dusting of poor quarters of the City. These were dusted four consecutive times and 4,320,432 persons were involved together with their effects and beddings.

#### *Small Pox :*

One case of small pox with no deaths occurred in 1948 or a ratio of 0.0005 per thousand of population as against 10 cases and 1 death in 1947, 20 cases and no deaths in 1946, 121 cases and 6 deaths in 1945; 2,288 cases and 129 deaths in 1946 and 1,283 cases and 83 deaths in 1943. This shows that the small pox epidemic of 1943 subsided in 1945, began to disappear in 1947 and came to an end in 1948 (See table No. 158)

#### *Anti Small-pox Vaccination :*

The general vaccination of the population of the City began in 1946, during which 286,715 persons were vaccinated. In 1947, the number vaccinated was 645,764.

During 1948, 552,074 persons were vaccinated in Adawia, Bulaq I, Bulaq II, Sharabia, Rod el Farag, Shubra, Ezbekia and Bab el Shaaria Qisms.

The number of vaccinated babies was 100,517

#### *Typhus :*

The number of cases notified this year was 30 with no deaths or a case-rate of 0.014 per thousand of population as compared with 49 cases and 10 deaths and a rate of 0.031 and 0.016 respectively per thousand of population in 1947, and 141 cases and 40 deaths and a rate of 0.092 and 0.026 respectively per thousand of population in 1946.

(See table No. 159)

#### *Vaccination Against Typhus :*

The number of persons vaccinated against Typhus during 1948 was 53,250. Each received three injections.

The number of slides taken by medical officers of Cairo qisms for Weil Felix reaction was 1,487 out of which 18 were taken after death and the remainder from living persons. Four specimens from living persons gave positive results.

#### *Typhoid :*

The number of cases notified during 1948 was 2,581 with 293 deaths i.e. a rate of 1.239 and 0.141 respectively per thousand of population as compared with 2,050 cases and 202 deaths and a rate of 1.292 and 0.127 respectively per 1000 of population during 1947.

(See table No. 160).

#### *Vaccination Against Typhoid :*

The number vaccinated was 127,226, each receiving two injections.

#### *Diphtheria :*

The number of cases notified during 1948 was 944 with 189 deaths or a rate of 0.453 and 0.081 respectively per thousand of population as compared with 980 cases and 159 deaths and a rate of 0.617 and 0.101 respectively per thousand of population during 1947.

(See table No. 161)

The number of children vaccinated against diphtheria was 75,853 receiving one injection, 70,743 two injections and 67,825 three injections.

#### *Measles :*

The number of cases notified during the year was 1,979 with 1,209 deaths or a rate of 0.950, and 0.581 respectively per 1000 of population as compared with 996 cases and 556 deaths or a rate of 0.627 and 0.167 respectively per 1000 of population during 1947.

(See table No. 162).



### *Cerebro Spinal Fever :*

The number of cases notified during 1949 was 39 cases and 9 deaths or a rate of 0.018 and 0.005 respectively per 1000 of population as compared with 72 cases and 21 deaths and a rate of 0.045 and 0.019 respectively per 1000 of population during 1947.

(See table No. 163).

### *Scarlet Fever :*

The number of cases reported during the year was 4 with no deaths or a case-rate of 0.002 per 1000 of population as compared with two cases and no deaths in 1947 and a case-rate of 0.001.

(See Table No. 164)

### *Influenza :*

The number of cases notified this year was 1,345 and one death or a rate of 0.647 and 0.0004 respectively per 1000 of population as compared with 1421 cases and 3 deaths and a rate of 0.895 and 0.042 respectively per 1000 of population in 1947.

### *Tuberculosis :*

The number of cases notified during 1948 was 3,508 with 1,568 deaths or a rate of 1.7 and 0.6 respectively per 1000 of population as compared with 3,232 cases and 1,483 deaths and a rate of 2.03 and 0.934 respectively per 1000 of population during 1947.

### *Deaths attributed to confinement :*

The number of deaths attributed to confinement was 88 with a rate of 0.88 per 1,000 births as compared with 2.16 in 1947, 1.3 in 1946, and 1.8 in 1945.

Of this figure, 25 were due to puerperal fever or a rate of 0.39 per 1000 births as compared with 1.97 per 1000 births in 1947, 0.46 per 1000 births in 1946, and 0.5 per 1,000 births in 1945.

The total number of mothers who died within a fortnight of confinement (excluding puerperal fever cases) amounted to 63 as compared with 101 in 1947, 98 in 1946, and 112 in 1945.

The causes of these deaths were as follows :

9 eclampsia, 20 metrorrhagy, 2 ectopic gestation, 10 heart failure after labour, 5 rupture of uterus, 1 cerebral embolism, 5 hard labour, 2 caesarian cases, 1 peritonitis, 3 nervous shock after labour, 3 other diseases and 2 tuberculosis.

### *Disinfection :*

In addition to the regular dusting of persons in poor quarters which was done 4 times during the year involving 4,320,432 persons with their clothes and bedding, the disinfection stations disinfected 1,978,603 rooms., 8,630 of these were done by Khalifa disinfection station, 61,236 rooms by Fom el Khalig and 1,908,757 rooms by Abbassia disinfection station.

TABLE No. 155.—VITAL STATISTICS OF CAIRO CITY 1948 COMPARED WITH PREVIOUS YEARS

Cairo Districts (Qisms)	Population	No. of Deaths	Death Rate per 1000 of pop.	No. of Births	Birth Rate per 1000 of pop.	No. of deaths Below One year	infantile death Rate per 1000 births
Qubba... ..	84,427	1,961	23·0	3,928	46.5	721	183
Heliopolis ... ..	85,585	1,143	10·3	2,141	25.0	303	141
Zeitoun ... ..	79,547	2,163	27	4,264	53.8	813	—
Abbassia ... ..	123,289	2,562	20·7	6,038	48.0	776	128
Ezbekia ... ..	75,413	2,083	27·6	3,963	52.5	740	186·7
Rod el Farag ... ..	195,890	4,531	23·2	9,171	46.8	1,775	193·5
Shubra ... ..	160,704	3,857	24·0	8,319	51.6	1,570	188·8
Sharabia ... ..	68,962	2,369	34·4	4,418	64	1,003	228
Gamalia ... ..	108,744	3,080	28·3	5,652	57.9	1,178	208·1
Bab el Shaaria ... ..	133,334	2,601	12·0	4,926	36.8	976	198
Abdin ... ..	96,911	1,723	17·7	2,664	27.6	519	193·3.
Mouski ... ..	52,942	1,493	28·2	2,816	53.1	567	201·3
Darb el Ahmar .	114,858	2,793	24·3	4,760	41.4	1,064	223·5
Khalifa ... ..	115,200	3,402	29·0	5,745	49.8	1,369	220·8
Sayeda I ... ..	92,800	2,953	31·8	5,851	63.0	1,149	196.3
„ II ... ..	101,064	2,396	23·7	3,642	36.0	1,047	287.4
Bulaq I ... ..	63,905	1,812	28·3	2,738	42.8	692	252.7
„ II ... ..	66,648	1,888	28,3	3,261	48.9	719	220.4
Adawia ... ..	63,555	2,226	35·2	6,165	93.0	964	156.3
Old Cairo ... ..	101,568	2,902	28·5	5,104	50.2	1,148	224·9
Helwan ... ..	45,686	946	27·0	2,004	43.8	353	176·1
Maadi ... ..	45,569	1,249	27·4	1,992	43.7	457	177.1
<b>TOTAL ... ..</b>	<b>2,076,601</b>	<b>52,133</b>	<b>25·6</b>	<b>99,557</b>	<b>47.9</b>	<b>19,908</b>	<b>190,9</b>
<b>1947 ... ..</b>	<b>1,573,800</b>	<b>43,687</b>	<b>27.5</b>	<b>100,546</b>	<b>63.4</b>	<b>17,201</b>	<b>161</b>
<b>946-42... ..</b>	<b>7,311,603</b>	<b>258,937</b>	<b>35·4</b>	<b>412,649</b>	<b>56.1</b>	<b>90,350</b>	<b>219</b>
<b>941-37... ..</b>	<b>6,819,400</b>	<b>181,557</b>	<b>26·6</b>	<b>233,940</b>	<b>34.3</b>	<b>58,148</b>	<b>248.4</b>
<b>936-32... ..</b>	<b>6,364,700</b>	<b>166,121</b>	<b>26·1</b>	<b>270,420</b>	<b>42.4</b>	<b>53,369</b>	<b>197.7</b>
<b>931-27... ..</b>	<b>5,365,400</b>	<b>156,855</b>	<b>29·2</b>	<b>242,377</b>	<b>45 1</b>	<b>53,228</b>	<b>211.3</b>



TABLE No.1 56—DISTRIBUTION OF UNCERTIFIED DEATHS 1948 ON CAIRO DISTRICTS.

Districts	Total No. of Deaths	Uncertified Deaths			Rate of Uncertified Deaths per 100 to total of general deaths
		No. ex. by M.O.S	No. ex. by Hakimas (Midwives)	Total	
Qubba ... ..	1,961	251	560	811	41·3
Heliopolis ... ..	1,143	86	464	550	48·1
Zeitoun ... ..	2,136	521	1,435	1,956	90·4
Abbassia ... ..	2,562	223	519	742	28·9
Ezbekia ... ..	2,083	150	589	739	35·4
Rod el Farag ... ..	4,531	232	865	1,097	24·2
Shubra ... ..	3,857	203	1 095	1,303	34
Sbarabia ... ..	2,469	403	1,381	1,784	71·6
Gamalia ... ..	3,080	223	175	398	13·
Bab el Shaaria ... ..	2,601	199	362	561	21·5
Abdin ... ..	1,723	230	765	995	57·
Mcuski ... ..	1,493	224	523	747	50
Darb el Abmar ... ..	2,793	1,315	310	1,625	58·3
Khalifa ... ..	3,402	671	1,827	2,498	73·4
Sayeda I ... ..	2,953	240	720	960	32·5
„ II ... ..	2,396	960	1,217	2,177	90·8
Bulaq I ... ..	1,812	338	907	1,245	66·7
„ II ... ..	1,888	385	1,042	1,427	75·5
Adawia ... ..	2,226	299	1,240	1,539	69·2
Old Cairo ... ..	2,902	1,080	1,310	2,390	82·3
Helwan ... ..	946	164	301	465	49·1
Maadi ... ..	1,249	278	357	635	50
<b>TOTAL ... ..</b>	<b>52,233</b>	<b>8,680</b>	<b>17,964</b>	<b>26,644</b>	<b>51·0</b>

TABLE No. 157.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES, 1948

Qisms	Population	Cholera		Small-pox		Relapsing fever		Typhus fever		Cerebro-Spinal		Typhoid		Measles		Diphtheria		Scarlet fever	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Qubba ..	84,427	—	—	—	—	—	—	4	—	1	—	119	10	60	5	54	14	—	—
Heliopolis	85,585	—	—	—	—	—	—	2	—	3	1	121	8	57	5	36	2	—	—
Zeitoun	79,547	—	—	—	—	—	—	3	—	2	1	103	10	159	91	37	6	—	—
Abbassia	123,289	—	—	—	—	—	—	1	—	2	1	200	34	85	17	81	22	1	—
Ezbekia	75,413	—	—	—	—	—	—	—	—	4	—	112	19	47	24	42	4	—	—
Rod-el-Farag	195,890	—	—	—	—	—	—	—	2	2	—	265	34	162	116	77	15	—	—
Shubra	160,704	—	—	—	—	—	—	1	—	4	—	212	23	65	19	59	10	—	—
Sharabia	68,962	—	—	—	—	—	—	2	—	1	—	136	11	194	133	25	2	—	—
Gamalia	108,744	—	—	—	—	—	—	—	—	4	—	135	9	52	11	62	13	1	—
Bab-el-Shaaria	133,334	—	—	—	—	—	—	—	—	3	1	115	11	67	20	54	12	—	—
Abdine ...	96,911	—	—	1	—	—	—	1	—	1	—	149	20	72	62	41	8	—	—
Mouski	52,942	—	—	—	—	—	—	2	—	—	—	94	7	62	39	23	6	—	—
Parb-el-Ahmar	114,858	—	—	—	—	—	—	1	—	2	1	168	18	44	31	39	11	1	—
Khalifa ...	115,200	—	—	—	—	—	—	4	—	3	—	137	12	163	100	26	4	1	—
Sayed I	192,800	—	—	—	—	—	—	2	—	1	—	98	9	71	28	71	9	—	—
Sayed II	101,064	—	—	—	—	—	—	2	—	—	—	118	15	87	45	70	23	—	—
Boulaq I	63,908	—	—	—	—	—	—	2	—	1	1	71	15	84	77	33	6	—	—
Boulaq II	99,648	—	—	—	—	—	—	—	—	—	—	51	8	37	37	23	5	—	—
Adawia	63,555	—	—	—	—	—	—	—	—	—	—	32	5	235	208	25	7	—	—
Old Cairo	101,568	—	—	—	—	—	—	1	—	4	—	83	9	131	111	47	7	—	—
Helwan	45,686	—	—	—	—	—	—	—	—	—	—	29	3	11	7	10	3	—	—
Maadi ...	45,569	—	—	—	—	—	—	—	—	1	—	33	3	34	23	9	—	—	—
<b>TOTAL</b> ...	<b>2,076,601</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>30</b>	<b>—</b>	<b>39</b>	<b>9</b>	<b>2,581</b>	<b>293</b>	<b>1,979</b>	<b>1,209</b>	<b>944</b>	<b>189</b>	<b>4</b>	<b>—</b>



TABLE No. 198. —DISTRICT DISTRIBUTION OF SMALL POX CASES AND DEATHS 1948

Quisms	Population	Number of Cases	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate per cent
Qubba ... ..	84,427	—	—	—	—	—
Heliopolis ... ..	85,585	—	—	—	—	—
Zeitoun ... ..	79,547	—	—	—	—	—
Abbassia ... ..	123,289	—	—	—	—	—
Ezbekia ... ..	75,413	—	—	—	—	—
Rod-el-Farag ... ..	195,890	—	—	—	—	—
Shubra ... ..	160,704	—	—	—	—	—
Sharabia ... ..	68,962	—	—	—	—	—
Gamalia ... ..	108,744	—	—	—	—	—
Bab-el-Shaaria ... ..	133,334	—	—	—	—	—
Abdine ... ..	96,911	1	.001	—	—	—
Mouski ... ..	52,942	—	—	—	—	—
Darb-el-Ahmar ... ..	114,858	—	—	—	—	—
Khalifa ... ..	115,200	—	—	—	—	—
Sayeda I ... ..	92,800	—	—	—	—	—
Sayeda II ... ..	101,064	—	—	—	—	—
Boulaq I ... ..	63,905	—	—	—	—	—
Boulaq II ... ..	66,648	—	—	—	—	—
Adawia ... ..	63,555	—	—	—	—	—
Old Cairo ... ..	101,568	—	—	—	—	—
Helwan ... ..	45,686	—	—	—	—	—
Maadi ... ..	45,569	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>2,076,601</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

TABLE No. 159 —DISTRICT DISTRIBUTION OF TYPHUS CASES AND DEATHS 1948

District	Population	Number of Cases	Case rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate percent
Qubba... ..	84,427	4	0.047	—	—	—
Heliopolis ... ..	85,585	2	0.022	—	—	—
Zeitoun ... ..	79,547	3	0.051	—	—	—
Abbassia ... ..	123,289	1	0.008	—	—	—
Ezbekia ... ..	75,413	—	—	—	—	—
Rod-el-Farag ... ..	195,890	—	—	—	—	—
Shubra ... ..	160,704	1	0.006	—	—	—
Sharabia ... ..	68,962	2	0.029	—	—	—
Gamalia ... ..	108,744	—	—	—	—	—
Bab-el-Shaaria ... ..	133,334	2	0.015	—	—	—
Abdine ... ..	96,911	1	0.010	—	—	—
Mouski ... ..	52,942	2	0.038	—	—	—
Darb-el-Ahmar ... ..	114,858	1	0.009	—	—	—
Khalifa ... ..	115,200	4	0.322	—	—	—
Sayeda I ... ..	92,800	2	0.022	—	—	—
Sayeda II ... ..	101,064	2	0.020	—	—	—
Boulaq I ... ..	63,905	2	0.032	—	—	—
Boulaq II ... ..	66,648	—	—	—	—	—
Adawia ... ..	63,555	—	—	—	—	—
Old Cairo ... ..	101,568	1	0.010	—	—	—
Helwan ... ..	45,686	—	—	—	—	—
Maadi ... ..	45,569	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>2,076,601</b>	<b>30</b>	<b>0.014</b>	<b>—</b>	<b>—</b>	<b>—</b>

TABLE NO. 160.—DISTRICT DISTRIBUTION OF TYPHOID CASES AND DEATHS 1948.

Districts	Population	Number of Cases	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate per cent
Qubba ... ..	84,427	119	1.409	10	0.118	8.4
Heliopolis ... ..	85,585	121	1.413	8	0.934	6.6
Zeitoun ... ..	79,547	103	1.295	10	0.126	9.7
Abbassia ... ..	123,289	200	1.622	34	0.276	17
Ezbekia ... ..	75,413	112	1.485	19	0.252	17
Rod-el-Farag ... ..	195,890	265	1.352	34	0.173	12.8
Shubra ... ..	160,704	212	1.319	23	0.143	10.8
Sharabia ... ..	68,962	136	1.972	11	0.060	8
Gamalia ... ..	108,744	135	1.242	9	0.082	6.6
Bab-el-Shaaria ... ..	133,334	115	.863	11	0.083	9.5
Abdine ... ..	96,911	149	1.536	20	0.206	13.4
Mouski ... ..	52,942	94	1.775	7	0.132	7.4
Darb-el-Ahmar ... ..	114,858	168	1.462	18	0.157	10.7
Khalifa ... ..	115,200	137	1.160	12	0.169	8.7
Sayed I ... ..	92,800	98	1.055	9	0.070	9.1
Sayed II ... ..	101,064	118	1.167	15	0.148	12.7
Boulaq I ... ..	63,905	71	1.122	15	0.237	21.1
Boulaq II ... ..	66,648	51	0.766	8	0.120	15.7
Boulaq III ... ..	63,555	32	0.503	5	0.079	15.6
Old Cairo ... ..	101,568	83	0.817	9	0.089	10.8
Helwan ... ..	45,686	29	0.415	3	0.066	10.3
Maadi ... ..	45,569	33	0.724	3	0.066	7.2
<b>TOTAL ... ..</b>	<b>2,076,601</b>	<b>2,581</b>	<b>1.239</b>	<b>293</b>	<b>0.141</b>	<b>5.4</b>

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TABLE NO. 161.—DISTRICT DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS 1948.

Districts	Population	Number of Cases	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate per cent
Qubba... ..	84,427	54	0.639	14	0.166	26
Heliopolis ... ..	85,585	36	0.420	2	0.022	6
Zeitoun ... ..	79,547	37	0.453	6	0.075	16.2
Abbassia ... ..	123,289	81	0.657	22	0.178	27.1
Ezbekia ... ..	75,413	42	0.557	4	0.053	9.5
Rod-el-Farag ... ..	195,890	77	0.393	15	0.077	19.4
Shubra ... ..	160,704	59	0.367	10	0.622	17
Sharabia ... ..	68,962	25	0.363	2	0.029	8
Gamalia ... ..	108,744	62	0.570	13	0.120	20.9
Bab-el-Shaaria ... ..	133,334	54	0.405	12	0.090	22.2
Abdine ... ..	96,911	41	0.423	8	0.082	19.7
Mouski ... ..	52,942	23	0.434	6	0.113	26
Darb-el-Ahmar... ..	114,858	39	0.339	11	0.096	28.1
Khalifa ... ..	115,200	26	0.210	4	0.032	15.4
Sayed I ... ..	92,800	71	0.765	9	0.070	12.4
Sayed II ... ..	101,064	70	0.692	23	0.227	32.9
Boulaq I ... ..	63,905	33	0.521	6	0.095	18.1
Boulaq II ... ..	66,648	23	0.345	5	0.075	21.7
Boulaq III ... ..	63,555	25	0.393	7	0.110	28
Old Cairo ... ..	101,568	47	0.462	7	0.069	15
Helwan ... ..	45,686	10	0.218	3	0.066	30
Maadi ... ..	45,569	9	0.197	—	—	—
<b>TOTAL ... ..</b>	<b>2,076,601</b>	<b>944</b>	<b>0.453</b>	<b>189</b>	<b>0.081</b>	<b>20.02</b>



TABLE NO. 162.— DISTRICT DISTRIBUTION OF MEASLES CASES AND DEATHS 1948.

Districts	Population	Number of Cases	Case rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate per cent
Qubba ... ..	84,427	60	0.710	5	0.059	83
Heliopolis ... ..	85,585	57	0.666	5	0.058	87
Zeitoun ... ..	79,547	159	1.999	91	1.144	572
Abbassia ... ..	123,289	85	0.689	17	0.138	20
Ezbekia ... ..	75,413	47	0.623	24	0.318	51
Rod-el-Farag ... ..	195,890	162	0.826	116	0.592	70
Shubra ... ..	160,704	65	0.404	19	0.118	30
Sharabia ... ..	68,962	194	2.813	113	6.929	68
Gamalia ... ..	108,744	52	0.478	11	0.101	21
Bab-el-Shaaria ... ..	133,334	67	0.503	20	0.150	29
Abdin ... ..	96,911	72	0.742	62	0.639	86.1
Mouski ... ..	52,942	62	1.171	39	0.736	63
Darb-el-Ahmar ... ..	114,858	44	0.339	31	0.270	70.4
Khalifa ... ..	115,200	163	1.314	100	0.806	61.3
Sayeda I ... ..	92,800	71	0.765	28	0.302	39.4
Sayeda II ... ..	101,064	87	0.860	45	0.445	51.7
Boulaq I ... ..	63,905	84	1.327	77	1.217	91.6
Boulaq II ... ..	66,648	37	0.555	37	0.555	10.0
Adawia ... ..	63,555	235	3.697	208	3.272	88.5
Old Cairo ... ..	101,563	131	1.289	111	1.092	84.7
Helwan ... ..	45,686	11	0.240	7	0.153	63.6
Maadi ... ..	45,569	34	0.746	23	0.505	70
<b>TOTAL ...</b>	<b>2,076,601</b>	<b>1,979</b>	<b>0.95</b>	<b>1,209</b>	<b>0.581</b>	<b>61</b>

TABLE NO. 163.— DISTRICT DISTRIBUTION OF CEREBRO SPINAL FEVER CASES AND DEATHS 1948.

Districts	Mid-year Population	Number of Cases	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate per cent
Qubba ... ..	84,427	1	0.011	—	—	—
Heliopolis ... ..	85,585	3	0.035	1	0.011	33.3
Zeitoun ... ..	79,547	2	0.034	1	0.013	50
Abbassia ... ..	123,289	2	0.016	1	0.008	50
Ezbekia ... ..	75,413	4	0.053	—	—	100
Rod-el-Farag ... ..	195,890	2	0.010	2	0.010	—
Shubra ... ..	160,704	4	0.025	—	—	—
Sharabia ... ..	68,962	1	0.015	—	—	—
Gamalia ... ..	108,744	4	0.037	—	—	—
Bab-el-Shaaria ... ..	133,334	3	0.023	1	0.008	33.3
Abdin ... ..	96,911	1	0.010	—	—	—
Mouski ... ..	52,942	—	—	—	—	—
Darb-el-Ahmar ... ..	114,858	2	0.017	1	0.009	50
Khalifa ... ..	115,200	3	0.024	—	—	—
Sayeda I ... ..	92,800	1	0.011	1	0.011	100
Sayeda II ... ..	101,064	—	—	—	—	—
Boulaq I ... ..	63,905	1	0.016	1	0.016	100
Boulaq II ... ..	66,648	—	—	—	—	—
Adawia ... ..	63,555	—	—	—	—	—
Old Cairo ... ..	101,568	4	0.039	—	—	—
Helwan ... ..	45,686	—	—	—	—	—
Maadi ... ..	45,569	1	0.022	—	—	—
<b>TOTAL ...</b>	<b>2,076,601</b>	<b>39</b>	<b>0.018</b>	<b>9</b>	<b>0.005</b>	<b>256</b>

TABLE No. 164. — DISTRICT DISTRIBUTION OF SCARLET FEVER CASES AND DEATHS 1948.

Districts	Population	Number of Cases	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case mortality rate per cent
Qubba ... ..	84,427	—	—	—	—	—
Heliopolis ... ..	85,585	—	—	—	—	—
Zeitoun ... ..	79,547	—	—	—	—	—
Abbassia ... ..	123,289	1	0.008	—	—	—
Ezbekia ... ..	75,413	—	—	—	—	—
Rod el Farag ... ..	195,890	—	—	—	—	—
Shubra ... ..	160,704	—	—	—	—	—
Sharabia ... ..	68,962	—	—	—	—	—
Gamalia ... ..	108,744	1	0.009	—	—	—
Bab el Shaaria ... ..	133,334	—	—	—	—	—
Abdin ... ..	96,911	—	—	—	—	—
Mouski ... ..	52,942	—	—	—	—	—
Darb el Ahmar ... ..	114,858	1	0.009	—	—	—
Khalifa ... ..	115,200	1	0.008	—	—	—
Sayeda I ... ..	92,800	—	—	—	—	—
Sayeda II ... ..	101,064	—	—	—	—	—
Boulaq I ... ..	63,905	—	—	—	—	—
Boulaq II ... ..	66,648	—	—	—	—	—
Adawia ... ..	63,555	—	—	—	—	—
Old Cairo ... ..	101,568	—	—	—	—	—
Helwan ... ..	45,686	—	—	—	—	—
Maadi ... ..	45,569	—	—	—	—	—
<b>TOTAL ...</b>	<b>2,076,601</b>	<b>4</b>	<b>0.002</b>	<b>—</b>	<b>—</b>	<b>—</b>



TABLE No. 165. — INFECTIOUS DISEASES CASES ADMITTED TO THE FEVER HOSPITAL, ABBASSIA, DURING 1948.

Diseases	1947		1948											
	No. of		No. of		Isolated within 3 days		Isolated within 4-7 days		Isolated within more than 7 Days		Cases Sent by P. H. offices	Cases Sent by Hospital	Cases Sent by Private Practitioners	Cases arriving on their own
	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.				
Typhus	47	8	37	1	10	1	17	—	10	—	6	6	15	10
Small-pox	10	1	1	—	1	—	1	—	—	—	—	—	1	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid	826	102	1,323	131	359	45	515	30	449	56	257	215	436	415
Para-Typhoid	293	9	373	10	719	—	72	3	112	7	82	74	123	94
Diphtheria	226	59	448	97	296	72	87	6	65	19	56	179	114	99
Pneumonia	434	77	636	97	305	67	196	9	135	21	172	120	164	180
Influenza	897	—	1,006	—	517	—	312	—	177	—	237	302	181	286
Measles	156	10	397	32	188	17	116	4	93	11	75	71	57	194
Scarlet Fever	3	—	4	—	1	—	1	—	2	—	1	—	2	1
Chicken-Pox	104	—	82	—	33	—	27	—	22	—	32	24	15	11
Cerebro Spinal fever	22	11	26	13	13	10	7	1	6	2	4	8	11	3
Whooping Cough	71	3	33	—	5	—	15	—	13	—	5	1	9	18
Tetanus	32	16	45	21	28	21	8	—	14	—	3	24	15	3
Puerperal Fever	41	2	49	3	27	—	13	—	9	1	6	29	8	6
Amoebic Dysentery	12	1	52	2	—	—	—	—	—	—	—	—	—	—
Bacillary Dysentery	2	—	7	1	16	3	31	—	12	—	9	22	11	17
Relapsing Fever	3	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	179	4	209	3	97	—	88	2	24	1	25	108	29	47
Cholera	2,825	201	2	—	2	—	—	—	—	—	—	2	—	—
Other Diseases	2,331	162	4,686	285	—	—	—	—	—	—	127	1,356	960	1,093
TOTAL	8,508	666	9,416	694	2,082	236	1,506	57	1,143	118	2,247	2,541	2,151	2,471

TABLE No. 166. — AGE AND SEX DISTRIBUTION OF INFLUENZA CASES, 1948

Age	Male			Female			TOTAL		
	Cases	Deaths	%	Cases	Deaths	%	Cases	Deaths	%
0— 5 years	55	—	—	31	—	—	86	—	—
5—10 „	21	—	—	26	—	—	47	—	—
10—15 „	53	—	—	38	—	—	91	—	—
15—20 „	123	—	—	55	—	—	178	—	—
20—25 „	202	—	—	34	—	—	236	—	—
25—35 „	208	—	—	31	—	—	239	—	—
35—45 „	71	—	—	14	—	—	85	—	—
45—65 „	41	—	—	3	—	—	44	—	—
TOTAL ...	774	—	—	232	—	—	1,006	—	—

TABLE No. 167 — AGE AND SEX DISTRIBUTION OF TYPHOID CASES AND DEATHS, 1948.

Age	Male			Female			Total			Widal		given 1 inj. before one month		
	Cases	Deaths	Rate %	Cases	Deaths	Rate %	Cases	Deaths	Rate %	Nega- tive	Posi- tive	Cases	Deaths	Rate %
0— 1 year ... ..	6	2	33·3	3	1	33·3	9	3	33·3	4	5	—	—	—
1— 2 years ... ..	23	3	13	13	—	—	36	3	8·33	14	22	1	—	—
2— 5 „ ... ..	209	16	7·6	148	13	8·7	357	29	8·1	124	233	8	—	—
5—10 „ ... ..	119	12	10·1	83	10	12·5	202	22	11	67	135	11	—	—
10—20 „ ... ..	222	24	10·8	146	14	9·6	368	38	10·3	176	192	14	1	7·14
20—25 „ ... ..	86	10	11·6	52	6	11·5	138	16	11·6	41	97	9	—	—
25—35 „ ... ..	67	1	1·5	57	6	10·5	144	7	5·6	39	85	12	—	—
35—45 „ ... ..	32	3	9·4	29	4	14	61	7	11·5	25	36	4	—	—
45—55 „ ... ..	11	2	18	9	1	11	20	3	15	3	17	1	—	—
55—65 „ ... ..	6	1	16·6	2	2	100	8	3	37·5	2	6	—	—	—
Over 65 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	781	74	9·5	542	57	10·5	1323	131	9·9	495	828	60	1	1·65



TABLE No. 168.—AGE AND SEX DISTRIBUTION OF PARA TYPHOID CASES AND DEATHS, 1948.

Age.	Male			Female			Total			Widal		2. T.A.B. more than one Month earlier		
	Cases	Deaths	Rate %	Cases	Deaths	Rate %	Cases	Deaths	Rate %	Positive	Negative	Cases	Deaths	Rate %
0— 1 year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1— 2 years ... ..	3	1	33·3	1	—	—	4	1	25	—	4	—	—	—
2— 5 „ ... ..	10	—	—	16	—	—	26	—	—	1	25	—	—	—
5—10 „ ... ..	25	1	4	14	—	—	39	1	2·6	—	39	—	—	—
10—20 „ ... ..	88	1	1·1	49	1	2	137	2	1·46	5	132	3	—	—
20—25 „ ... ..	53	—	—	14	3	21·4	67	3	4·5	3	64	3	—	—
25—35 „ ... ..	43	1	2·3	16	—	—	59	1	1·7	3	56	—	—	—
35—45 „ ... ..	19	1	5·3	10	—	—	29	1	3·45	3	26	1	—	—
45—55 „ ... ..	7	1	1·3	4	—	—	11	1	9	2	9	1	—	—
55—65 „ ... ..	—	—	—	1	—	—	1	—	—	—	1	—	—	—
Over 65 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	248	6	2·4	125	4	3·2	373	10	2·7	17	356	8	—	—

TABLE No. 169.—AGE AND SEX DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS, 1948.

Age.	Male			Female			Total			Swab		3 Anatoxin more than one month earlier		
	Cases	Deaths	Rate %	Cases	Deaths	Rate %	Cases	Deaths	Rate %	Negative	Positive	Cases	Deaths	Rate %
0— 1 year ... ..	41	14	34	30	12	40	71	26	36·6	50	21	—	—	—
1— 2 years ... ..	62	15	24·2	43	6	14	105	21	20	75	27	92	13	14
2— 3 „ ... ..	43	10	23	39	8	20·5	82	18	22	59	23	79	5	6·3
3— 4 „ ... ..	40	9	22·5	37	6	16	77	15	20	57	20	76	7	9·2
4— 5 „ ... ..	27	6	22	18	5	28	45	11	34·4	27	18	35	7	0·20
5—10 „ ... ..	12	2	16·6	30	3	10	42	5	12	28	14	42	1	2·4
10—20 „ ... ..	3	—	—	11	—	—	14	—	—	9	5	14	—	—
20—25 „ ... ..	3	1	33·3	3	—	—	6	1	16·6	4	2	6	—	—
Over 25 „ ... ..	3	—	—	3	—	—	6	—	—	5	1	6	—	—
TOTAL ... ..	234	57	34·4	214	40	18·5	448	97	21·6	317	131	248	33	13·3

TABLE No. 170.— AGE AND SEX DISTRIBUTION OF PNEUMONIA CASES AND DEATHS, 1948

Age	Lobar										Broncho Pneumonia						GRAND TOTAL								
	Male					Female					TOTAL					Male			Female			TOTAL			
	Deaths		Rate %		TOTAL	Cases		Deaths		Rate %	Cases		Deaths		Rate %	Cases		Deaths		Rate %	Cases		Deaths		Rate %
	Cases																								
1— 2 years ... ..	10	2	20	50	4	14	28.6	4	12	25	48	12	44	12	27.3	92	24	28	62	106	28	26.4			
2— 5 „ ... ..	17	2	11.8	33.3	3	20	15	3	11	27	41	11	34	10	26.5	75	21	24	28	95	24	25.3			
5—10 „ ... ..	6	—	—	—	—	8	—	—	1	14.3	7	1	9	1	11	16	2	2	12.5	24	2	8			
10—15 „ ... ..	20	1	5	25	2	24	8.3	2	—	—	10	—	4	—	—	14	—	2	—	38	2	3.5			
15—25 „ ... ..	79	3	3.8	—	3	91	3.3	3	1	4	26	1	10	—	—	36	1	4	2.8	147	4	3.1			
25—35 „ ... ..	67	2	3	25	4	75	5.3	4	3	9.7	31	3	10	2	20	41	5	9	12.2	116	9	3			
35—45 „ ... ..	34	4	11.8	—	4	38	10.5	4	3	15.8	19	3	7	—	—	26	3	7	11.5	64	7	11			
45—55 „ ... ..	25	2	8	33.3	4	31	13	4	5	50	10	5	4	1	25	14	5	10	43	45	10	2.2			
55—65 „ ... ..	5	1	20	—	1	6	16.6	1	4	50	8	4	2	1	50	10	6	6	50	10	6	37.4			
Over 65 „ ... ..	2	2	100	—	2	2	100	2	3	100	3	3	—	—	—	3	3	5	100	5	5	100			
TOTAL ... ..	265	19	7.1	18	27	309	8.7	27	43	21	203	43	124	27	22	327	70	97	21.4	636	97	13.7			



TABLE No. 171—AGE AND SEX DISTRIBUTION OF TYPHUS CASES AND DEATHS 1948

Age	Male			Female			Total			Blood W.F.		Vaccinated 3 times more than one Month earlier		
	Cases	Deaths	Rate%	Cases	Deaths	Rate%	Cases	Deaths	Rate%	Nega- tive	Posi- tive	Cases	Deaths	Rate%
0— 5 years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5—10 „ .. ...	1	—	—	—	—	—	1	—	—	—	1	—	—	—
10—15 „ ... ..	1	—	—	2	—	—	3	—	—	1	2	—	—	—
15—20 „ ... ..	4	—	—	1	1	100	5	1	20	—	4	—	—	—
20—25 „ ... ..	3	—	—	1	—	—	4	—	—	1	3	—	—	—
25—30 „ ... ..	5	—	—	—	—	—	5	—	—	—	5	—	—	—
30—35 „ ... ..	6	—	—	1	—	—	7	—	—	1	6	—	—	—
35—45 „ ... ..	6	—	—	1	—	—	7	—	—	3	4	—	—	—
45—55 „ ... ..	3	—	—	2	—	—	5	—	—	3	2	—	—	—
55—65 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Over 65 years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	29	—	—	8	1	12,0	37	1	2,7	9	27	—	—	—

N.B.—One case died before W.F. was taken.

TABLE No. 172—AGE AND SEX DISTRIBUTION OF ERYSIPELAS CASES AND DEATHS, 1948.

Age	Male			Female			TOTAL			Sulpha Treat.			Penicillin Treat.			Sulpha and penicillin		
	Cases	Deaths	M.R. %	Cases	Deaths	M.R. %	Cases	Deaths	M.R. %	Cases	Deaths	M.R. %	Cases	Deaths	M.R. %	Cases	Deaths	M.R. %
1-2 years	13	1	8	8	—	—	21	1	5	19	1	5.25	1	—	—	1	—	—
2-5 "	—	—	—	3	—	—	3	—	—	—	—	—	—	—	—	3	—	—
5-10 "	1	—	—	5	—	—	6	—	—	5	—	—	—	—	—	1	—	—
10-15 "	5	—	—	5	—	—	10	—	—	9	—	—	—	—	—	1	—	—
15-25 "	39	—	—	16	—	—	55	—	—	46	—	—	1	—	—	8	—	—
25-35 "	22	—	—	16	—	—	38	—	—	34	—	—	2	—	—	2	—	—
35-45 "	17	—	—	17	—	—	34	—	—	30	—	—	—	—	—	4	—	—
45-55 "	15	—	—	15	—	—	30	—	—	19	—	—	7	—	—	4	—	—
55-65 "	5	1	20	5	1	20	10	2	20	7	1	13.6	1	—	—	2	1	50
Over 65 "	1	—	—	1	—	—	2	—	—	2	—	—	—	—	—	—	—	—
TOTAL	118	2	1.7	91	1	1.1	209	3	1.4	171	2	1.2	12	—	—	26	1	3.9



TABLE No. 173—AGE AND SEX DISTRIBUTION OF C.S. FEVER CASES AND DEATHS, 1948.

Age	Male			Female			TOTAL			C.S.F. for meningococcus		Throat Swab	
	C.	D.	R. %	C.	D.	R. %	C.	D.	R. %	Nega- tive	posi- tive	Nega- tive	posi- tive
1—2 years ...	4	3	75	—	—	—	4	3	75	3	1	4	—
2—5 „ ...	5	3	60	1	—	—	6	3	50	5	1	6	—
5—10 „ ...	2	—	—	—	—	—	2	—	—	2	—	2	—
10—15 „ ...	2	—	—	1	—	—	3	—	—	2	1	3	—
15—20 „ ...	2	1	50	1	1	100	3	2	66.6	2	1	3	—
20—25 „ ...	1	1	100	2	1	50	3	2	66.6	3	—	3	—
25—35 „ ...	1	—	—	—	—	—	1	—	—	1	—	1	—
35—45 „ ...	—	—	—	—	—	—	—	—	—	—	—	—	—
45—55 „ ...	2	2	100	1	—	—	3	2	66.6	2	1	3	—
55—65 „ ...	1	1	100	—	—	—	1	1	100	1	—	1	—
Over 65 „ ...	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	20	11	55	6	2	33.3	26	13	50	21	5	26	—

### Passengers :

During 1948, a total of 16,884 passengers arrived in Cairo from infected countries, as compared with 30,104 in 1947.

Of this number, 9,020 passengers arrived by air, 782 arrived by car via Ismailia, 2,234 passengers by train via Kantara. Those arriving by sea were 946 passengers via Suez, 3,325 via Alexandria and 577 via Port-Said.

Moreover, 3,969 passengers arriving from the Sudan through Shellal were observed for Small Pox and Meningitis. All the passengers (with the exception of 198 who could not be traced) were observed during the regulation period, giving a percentage of 99 % observed.

### Pilgrims :

The number of Pilgrims arriving from the Hedjaz during 1948 was 4001 as compared with 2079 in the previous year.

All these pilgrims were observed during the regulation period and found in good health.

### Deaths :

36 pilgrims died in the Hedjaz.

Moreover, 137 pilgrims from other localities than Cairo were observed during the regulation period.

### Tor Mission :

34 Officials of the Tor Mission were observed and found in good health.

## Sanitary Control of Public Women

The total number of registered prostitutes for the year 1948 was 422 as compared with 463 in 1947. Of these, 119 were struck off the register during the year.

The total number of examinations held was 18,557. 184 prostitutes were found suffering from venereal diseases, distributed as follows :

Chronic Gonorrhoea	...	...	...	...	...	148
Primary Syphilis	...	...	...	...	...	1
Secondary „	...	...	...	...	...	35
TOTAL						<u>184</u>

The number of arrested women was 272 as compared with 125 in 1947. The incidence of disease amongst them was as follows :

Chronic Gonorrhoea	...	...	...	...	...	70
Primary Syphilis	...	...	...	...	...	1
Secondary Syphilis	...	...	...	...	...	35
TOTAL						<u>106</u>

Wassermann examination of blood showed that out of 469 prostitutes 51 were, positive ; and out of 208 arrested women, 58 were positive.

Complaints against prostitutes : 29 complaints were received. 4 prostitutes were found sick and the rest of the complaints were false.

## Police Health Office

The strength of Cairo City police in 1948 was 13,758 of all ranks. The following is a short description of the work carried out by this office during the year.

### MEDICAL WORK.

Policemen examined for sick leaves	...	...	...	...	...	969
Other police personnel examined for sick leaves	...	...	...	...	...	1,224
Medico-Legal reports	...	...	...	...	...	32,489
Car and cab drivers examined for practising profession	...	...	...	...	...	6,537
Candidates examined for service in Police force	...	...	...	...	...	345

### SANITARY WORK

Inspection of Police units	...	...	...	...	...	84
No. of those injected against Cholera	...	...	...	...	...	7,778
No. of men vaccinated against Small pox	...	...	...	...	...	10,317
No. of men vaccinated against typhoid (2 injections)	...	...	...	...	...	6,906
Persons stung by scorpions and received 1st aid injections	...	...	...	...	...	919

It was observed that the most prevalent diseases among non-commissioned officers and policemen were : wounds, bronchitis, abscesses and ophthalmia. The number of cases of these diseases were : 1077, 979, 863, and 862 respectively.

The diseases most prevalent among officers and civilians were, wounds, rheumatism, diarrhoea, and bronchitis. The number of these diseases were : 304, 231, 197, and 163 respectively.

21 members of the police force were sent to the fever hospital suffering from typhoid and para-typhoid. 425 persons were put under observation for infectious diseases during the year.



## Unhealthy, Inconvenient, and Dangerous Establishments

The following establishments were licensed during the year, under Law No. 13 of August 28, 1904, and Arrêté of the Ministry of Interior of August 29 of the same year.

1st class			2nd class			3rd class			GRAND TOTAL
Saha	Zabt	TOTAL	Saha	Zabt	TOTAL	Saha	Zabt	TOTAL	
263	223	486	1,067	487	1,554	566	149	715	2,755

244 public establishments were licensed during the year under Law No. 38 of 1941.

A total of 31,374 unhealthy, inconvenient, and dangerous establishments were inspected during 1948. Of these, 24,674 were found satisfactory and 6,700 unsatisfactory.

Establishments at Mouski and Darb el Ahmar districts were not inspected. Instructions were given to observe this in future.

Out of 3,361 public establishments inspected, 2,825 were found satisfactory and 536 unsatisfactory. Again establishments at Mouski and Darb el Ahmar were not inspected and instructions were given to observe this in future.

2,386 Procès-verbaux of contravention were drawn up against establishments exploited without licences, and 1,845 contraventions were drawn up for lacking conditions in licensed establishments making a total of 4,231 contraventions.

Under theatres regulations, 97 theatres, cinemas and other establishments were inspected during the year.

## General Sanitation

The activities of the Sanitation Section during the year 1948 may be summarised as follows :

(1) Samples of water were regularly taken from the different water supply mains of the City, Helwan, Zeitoun, Heliopolis and Giza in order to ensure their purity. Samples of water were also regularly taken from different taps of the City and from swimming-baths for the same purpose.

(2) Eight more slope water gulleys were erected to receive waste water in different parts of the City. Selection of sites was determined in conjunction with the Tanzim, Département.

(3) Quack doctors were put under observation and legal proceedings were taken against those arrested.

(4) Control of cleanliness of streets, roads, and houses, and prosecution of offenders.

(5) Control of sewage disposal and prosecution of persons dumping sewage on unauthorised sites.

(6) Application of Law No. 151 of 1947 governing the fencing and cleanliness of waste lands.

(7) 1,905 free permits were given for evacuation of private cisterns.

(8) Some 7000 complaints were received and dealt with during the year in respect of throwing dirty water in the streets, overflowing cisterns and dirty houses etc.

(9) The department has 210 free water taps. This section is responsible for their control, repair and maintenance.

(10) There are eight vegetable washing basins sited at the entrances of the City. This section is responsible for their control and maintenance.

(11) 3120 compulsory evacuations of cisterns were carried out by this Section.

TABLE NO. 174 —PUBLIC BATHS AND LAUNDRIES 1948.

No.	Address	No. of visitors	No. of persons deloused	Quantity of soap used Kilo Gram
1	Sidi Abdel Gawad, Boulaq ... ..	118,069	72,054	5,470.5
2	Tal Zenhom, Sayeda ... ..	108,596	64,958	4,870.5
3	Darb El Onsia, Darb El Ahmar ...	86,912	46,554	4,141.5
4	El Otouf, Gamalia ... ..	100,739	51,105	4,069
5	El Bakria, Bab El Shaaria ... ..	89,402	49,743	4,255.5
6	Boulaq Health Centre ... ..	26,527	19,195	1,403.5
7	Tura El Faroukia ... ..	49,856	28,270	2,277.8
8	Khalifa ... ..	102,934	53,999	4,626.5
9	Sayeda Zemab ... ..	81,881	44,751	4,055.85
10	Old Cairo ... ..	96,966	51,130	4,658.25
11	Mohammady, Abbassia ... ..	96,853	51,126	4,499
TOTAL ... ..		956,735	532,885	44,358.15 i.e about 45 Tons

*Health Office at the Permits Department of the Ministry of Interior.*

Some 42,807 persons were vaccinated against typhoid, typhus, and small-pox during the year by this office.

Ante-matrimony Examination Office (Boulaq Health Centre)

No of persons presented themselves for examination =212 (206 Males, 6 Females)

98 Eligible and received certificates .

45 Eligible but did not turn up for the certificates

33 Ceased attendance before completion of examination.

36 Ineligible (16 Gonorrhoea, 18 Syphilis, 1 mental disease, 1 Chest disease).

TABLE NO. 175— NUMBER OF MILK SAMPES TAKEN DURINO 1948 AND THE RATE OF ADULTERATION THEREOF

Number of Samples	Adulterated Samples						Total number of adult. samples	Number of genuine samples	Total Percentage of adulteration
	Skimmed Samples	Samples to which water was added		Samples skimmed and to which water was added					
		Rate of adult.		Rate of adult.		Rate of adult.			
3,906	756	19.3%	148	3.7 %	180	4.6 %	1084	2,822	27.7 %

N.B. — 3 samples adulterated by addition of formaline and carbonate.



TABLE NO. 176—CONTRAVENTIONS DRAWN UP DURING THE YEAR 1948  
UNDER THE FOLLOWING ACTS ;

Procès-Verbaux drawn up Under Law 8 of 1941 <i>re</i> Frauds	Procès-Verbaux drawn up Under Law 73 of 1943 <i>re</i> Vendors.	Procès-Verbaux drawn up Under Arrêté of Cairo Governorate dated 27.3.911 <i>re</i> Markets	Procès-Verbaux drawn up Under order 386-Law 108 of 1946 <i>re</i> , Refuse	Procès-Verbaux drawn up Under slaughter-houses Regulations of 1908	Procès Verbaux drawn up Under order 281 Law 108 of 1945 <i>re</i> , Ice-Cream manufacture
1,135	3,343	89	374	35	24

Number of Milk vendors who were licensed	...	...	...	...	...	171
„ of ambulant vendors who were licensed	...	...	...	...	...	138
„ of cases of food poisoning.	...	...	...	...	...	127
„ of complaints received by the Section and verified	...	...	...	...	...	512





TABLE No. 177—NUMBER, QUANTITY AND KIND OF FOODSTUFFS DESTROYED BY AGREEMENT WITH THE OWNERS, AND NUMBER OF SPECIMENS TAKEN BY INSPECTORS OF CAIRO CITY HEALTH DEPARTMENT AND THE RESULT OF ANALYSIS OF THE SPECIMENS

Kind of Foodstuffs	Foodstuffs destroyed					Specimens taken					Percentage of adulteration	Percentage of decomposition	Remarks
	No.	Bottle	Tin	Litre	Oke	No. of Specimens	Genuine	Adulterated	Decomposed	No result			
A.—Fresh Foods:													
Fruits and vegetables ...	9,927	—	—	2,137	4,679	—	—	—	—	—	—	—	
Fish ...	—	—	—	—	4,388	—	—	—	—	—	—	—	
Meats ...	2	—	—	—	38	—	—	—	—	—	—	—	
Slaughtered Birds ...	207	—	—	—	5	—	—	—	—	—	—	—	
B.—Cooked or Prepared Foods ...													
	2,194	—	—	—	533	3	3	—	—	—	—	—	
C.—Preserved Foods:													
Jam ...	—	—	—	—	—	14	14	—	—	—	—	—	
Milk and its products ...	—	—	233	—	—	—	—	—	—	—	—	—	
Vegetables and fruits ...	—	—	14,732	—	95	104	102	—	2	—	—	—	
Meats ...	—	—	3,052	—	21	1	1	—	—	—	—	2%	
Fish ...	—	—	1,744	—	43	—	—	—	—	—	—	—	
Other articles of food ...	—	—	4	—	126	3	3	—	—	—	—	—	
Olives and Pickles ...	—	—	—	—	—	—	—	—	—	—	—	—	
D.—Oils:													
Olive oil ...	—	—	—	—	—	2	2	—	1	—	—	12½%	
Sesame oil ...	—	—	—	—	—	5	5	—	—	—	—	—	
Linseed oil ...	—	—	—	—	—	13	9	2	—	—	—	15%	
Lettuce oil ...	—	—	—	—	12	—	—	—	—	—	—	—	
Oat oil ...	—	—	—	—	—	—	—	—	—	—	—	—	
Cotton seed oil ...	—	—	—	—	—	10	10	—	—	—	—	—	





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